

DRILLING MORNING REPORT # 28
Trefoil-2

28 Oct 2009

 From: Bryan Houston / Peter Dane
 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\$576,391
Rig	Kan Tan IV	Days from spud	22.67	Shoe MDBRT	930.0m	Cumul. Cost	US\$20,993,165
Wtr Dpth(MSL)	69.0m	Days on well	27.13	FIT/LOT:	/ 15.15ppg		
RT-ASL(MSL)	26.0m	Planned TD MD	3221.0m	Current Op @ 0600	Making up 8 3/8" overshot, dressed with 6 3/4" spiral grapple.		
RT-ML	95.0m	Planned TD TVDRT	3221.0m	Planned Op	Continue to fish 11-1/4" overshot, retrieve fish to surface. RIH and fish 11-3/4" overshot, POOH with fish. Make up 11-3/4" overshot and RIH, engage fish and shear casing and work running tool free.		

Summary of Period 0000 to 2400 Hrs

Laid down Halliburton SSR cement head. Picked up 8.5" BHA and racked back in derrick. Investigated problems with TDS hydraulic system. RIH with 11-1/4" overshot assembly. Engaged fish and attempted to back off casing. No success. POOH. RIH with 11-3/4" overshot assembly. Engaged fish and attempted to back off casing. POOH to surface. Left overshot, bumper sub and jars in hole. Fish #2 at 74.7mRT

HSE Summary

Events	Num. Events	Days Since	Descr.	Remarks
Abandon Drill	1	4 Days	Held abandon drill	
Fire Drill	1	4 Days	Main deck - Fire in rubbish container	
Flash Reports	43	0 Days	Debris on helicopter rotor head	
Incident	1	0 Days	Flying Object Debris	
Permit To Work	11	0 Days	Permits administered	
Pre-tour Meeting	2	0 Days	Shift change meetings	
Safety Meeting	2	3 Days	Held 2 x General Safety Meeting	
STOP Card	35	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 28 Oct 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P13	P	G2	0000	0100	1.00	2520.0m	Laid down Halliburton SSR cement head.
P13	P	G2	0100	0300	2.00	2520.0m	Picked up and made up 2 x 6.75" drill collars and 1 x 6.75" drilling jars and racked back in derrick.
P13	P	G2	0300	0630	3.50	2520.0m	Installed diverter and wiper rubber. Picked up 9 x 5" HWDP and racked back same in derrick. Drifted all tubulars with 3" drift. Moved 2 x stands of 5" HWDP from port to starboard side of derrick.
P13	P	G2	0630	0730	1.00	2520.0m	Picked up 9 joints of 5" drill pipe and racked back in derrick. Drifted all tubulars with 3" drift.
P13	TP (RE)	G11	0730	1030	3.00	2520.0m	Investigated problems with TDS hydraulic system.
P13	TP (WB)	G18	1030	1500	4.50	2520.0m	RIH with 11 1/4" overshot assembly to above fish at 81.5m. Cleaned all boxes and pins with diesel and made up each connection dry. Torqued each connection to 32,000 ft/lbs. Engaged fish with 50klb overpull. Applied 20,000 ft/lbs left hand torque, torque slipped. Attempted to engage grapple numerous times. No success. POOH to surface.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P13	TP (WB)	G18	1500	1930	4.50	2520.0m	Checked basket grapple, the first 2 to 3 inches of wickers were worn flat. Made up 11-3/4" overshot, dressed with 7-3/4" basket grapple, bumper sub, jars, 4 x 8" drill collars, accelerator, crossover. Changed out damaged 8" drill collar. Torqued each 6 5/8" connection to 56,000 ft/lbs
P13	TP (WB)	G18	1930	2400	4.50	2520.0m	RIH with 11-3/4" overshot assembly to above fish at 81.5m. Engaged fish, confirmed with 10k overpull. Began jarring lightly on fish. Slacked off to 160klb and picked up to 230klb - jars firing. Made several attempts, unsuccessful. Set torque limit to 30,000 ft/lbs. Applied 27,000 ft.lbs of left hand torque (23 turns). String jumped. POOH to surface. Observed top sub connection on Jars had backed off, leaving the 11 3-4" overshot, bumper sub and jars in the hole. Top of fish #2 at 74.7mRT

Operations For Period 0000 Hrs to 0600 Hrs on 29 Oct 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P13	TP (WB)	G18	0000	0230	2.50	2520.0m	RIH with 11-1/4" overshot, dressed with 8" basket grapple to top of fish at 74.7mRT (fish #2). Made several attempts to engage fish, without success. POOH to surface to change basket grapple. All connections were torqued to 32,000 ft/lbs on previous run.
P13	TP (WB)	G18	0230	0400	1.50	2520.0m	RIH with 11-1/4" overshot, dressed with 7-7/8" basket grapple to top of fish at 74.7mRT (fish #2.) Made several attempts to engage, without success. POOH to surface. Maximum left hand torque applied 6000 ft/lbs to attempt to engage fish. At surface observed the 11-1/4" overshot and crossover missing.
P13	TP (WB)	G18	0400	0600	2.00	2520.0m	Ran back in hole and attempted to screw back into the top of the 11-1/4" overshot at 73.3mRT (fish #3). No success. POOH to surface

Operations For Period Hrs to Hrs on
Phase Data to 2400hrs, 28 Oct 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)	156	22 Oct 2009	28 Oct 2009	651.00	27.125	2520.0m

WBM Data
Cost Today US\$ 19204

Mud Type:	KCl POLYMER	API FL:	4.8cc/30min	Cl:	42000mg/l	Solids(%vol):	3%	Viscosity	59sec/qt
Sample-From:	2	Filter-Cake:	1/32nd"	K+C*1000:	9%	H2O:	93%	PV	11cp
Time:	11:00 hrs	HThP-FL:	13.0cc/30min	Hard/Ca:	400mg/l	Oil(%):		YP	23lb/100ft ²
Weight:	9.40ppg	HThP-cake:	2/32nd"	MBT:	10	Sand:	.3	Gels 10s	11
Temp:				PM:	0.3	pH:	9	Gels 10m	16
				PF:	0.2	PHPA:	2ppb	Fann 003	10
Comment	Note: Cost is in AUD							Fann 006	12
								Fann 100	24
								Fann 200	30
								Fann 300	34
								Fann 600	45

BHA # 12

Weight(Wet)	Length	90.0m	Torque(max)	D.C. (1) Ann Velocity	
Wt Below Jar(Wet)	String	175000.00klb	Torque(Off.Btm)	D.C. (2) Ann Velocity	
	Pick-Up	175000.00klb	Torque(On.Btm)	H.W.D.P. Ann Velocity	
	Slack-Off	180000.00klb		D.P. Ann Velocity	
BHA Run Description	11-3/4" overshot, dressed with 7-3/4" basket grapple				
BHA Run Comment					
Equipment	Length	OD	ID	Serial #	Comment
Overshot	1.90m	11.75in	7.75in		
Bumper sub	1.74m	6.63in	8.00in	26596	
Fishing Jar	3.71m	6.63in	3.00in	72978	
Drill Collar	9.30m	8.00in	2.88in		

Equipment	Length	OD	ID	Serial #	Comment
Drill Collar	9.43m	8.00in	2.88in		
Drill Collar	9.43m	8.00in	2.88in	1168	
Drill Collar	9.39m	8.00in	2.88in	1162	
Accelerator	5.48m	6.63in	3.00in	802066	
X/Over Sub	1.11m	5.00in	2.75in		
Drill Pipe	9.57m	5.00in	4.28in		
Drill Pipe	9.65m	5.00in	4.28in		
Drill Pipe	9.66m	5.00in	4.28in		
Drill Pipe	9.62m	5.00in	4.28in		

BHA # 11

Weight(Wet)	Length	93.4m	Torque(max)	D.C. (1) Ann Velocity
Wt Below Jar(Wet)	String	175000.00klb	Torque(Off.Btm)	D.C. (2) Ann Velocity
	Pick-Up	175000.00klb	Torque(On.Btm)	H.W.D.P. Ann Velocity
	Slack-Off	180000.00klb		D.P. Ann Velocity

BHA Run Description 11 1/4" Overshot assembly, dressed with a 7 7/8" spiral grapple.

BHA Run Comment

Equipment	Length	OD	ID	Serial #	Comment
Overshot	2.06m	11.25in	7.88in	62580G	
X/Over	1.09m	8.38in	3.00in	1792	
Bumper sub	1.89m	6.50in	2.25in	GK0267	
Pup Joint	1.56m	5.00in	3.00in		
HWDP	9.45m	5.00in	3.00in	986	
HWDP	9.47m	5.00in	3.00in	977	
HWDP	9.46m	5.00in	3.00in	968	
HWDP	9.43m	5.00in	3.00in	972	
HWDP	9.44m	5.00in	3.00in	975	
HWDP	9.47m	5.00in	3.00in	973	
HWDP	9.47m	5.00in	3.00in	989	
HWDP	9.43m	5.00in	3.00in	980	
HWDP	9.46m	5.00in	3.00in	966	

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Rig Fuel	m3	0	13	0	353.0
Drill Water	m3	0	5	0	567.0
Pot Water	m3	21	27	0	173.0
Brine	m3	0	0	0	71.0
Barite	MT	0	0	0	149.7
Baradefoam-W300	can	0	0	0	9.0
Barolift	boxes	0	0	0	18.0
Bentonite	MT	0	0	0	81.2
Caustic Soda	pail	0	0	0	32.0
Lime	sx	0	0	0	4.0
Soda Ash	sx	0	0	0	15.0
Sodium Bicarbonate	25kg sx	0	0	0	38.0
Rig Fuel	m3	0	0	0	561.0
Drill Water	m3	0	0	0	266.0
Potable Water	m3	0	0	0	208.0
Shaker Screen 50	Screens	0	0	0	8.0

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	60	3000	300	2515.0	30	220	150	40	270	200	50	350	250

Pumps																	
Pump Data - Last 24 Hrs								Slow Pump Data									
2	Continental Emsco	6.50	1.09	97	60	3000	300	2515.0	30	240	190	40	290	260	50	350	250
3	Continental Emsco	6.50	1.09	97	60	3000	300	2515.0	30	200	150	40	270	200	50	350	260

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	47
GRN	3
OMS	12
Nopsa	2
Geoservices	4
Halliburton Cementers	2
Halliburton	3
Halliburton (Baroid)	2
Dril-Quip	1
Fugro ROV	3
Swaco	1
PCS	3
Smith Services	1
Others	2
Total	90

Mud Volumes, Mud Losses and Shale Shaker Data				Engineer : Mike Lawrance / James Munford			
Available	2782.6bbl	Losses	0.0bbl	Equipment	Description	Mesh Size	Comments
Active	617.0bbl	Downhole		Shaker 1	Brandt VSM 300	20 top/100bottom	
Mixing	0.0bbl	Surf+ Equip	0.0bbl	Shaker 1	Brandt VSM 300	20 top/100bottom	
Hole	1150.6bbl	Dumped		Shaker 2	Brandt VSM 300	20 top/100bottom	
Slug Reserve	1015.0bbl	De-Gasser		Shaker 3	Brandt VSM 300	20 top/100bottom	
Kill		De-Sander		Shaker 3	Brandt VSM 300	20 top/100bottom	
		De-Siljer		Shaker 4	Brandt VSM 300	20 top/100bottom	
		Centrifuge		Shaker 4	Brandt VSM 300	20 top/100bottom	

Marine								Rig Support	
Weather on 28 Oct 2009								Anchors	Tension (klb)
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period		
10.0nm	3kn	70.0deg	1025.0mbar	11C°	0.3m	120.0deg	3s	1	178.0
Heave	Pitch	Roll	Rig Dir.	Ris. Tension	VDL	Weather Comments		2	192.0
1.2m	0.7deg	1.4deg	317.0deg	240000.00klb	215401.00klb			3	196.0
Swell Height	Swell Dir.	Swell Period	Comments					4	213.0
0.9m	120.0deg	5s						5	235.0
								6	213.0
								7	191.0
								8	210.0

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks			
Far Scimitar			On location KT4	Item	Unit	Used	Quantity
				Rig Fuel	M3		375

				Item	Unit	Used	Quantity
				Potable Water	M3		490
				Drill Water	M3		196
					t		0
				Barite	t		0
				Bentonite	t		0
				Brine	M3		165

Far Fosna			Enroute to rig	Item	Unit	Used	Quantity
				Rig Fuel	M3		565
				Pot Water	M3		595
				Drill Water	M3		362
				Bentonite	t		20
				Barite	t		20
					t		130
				Brine	M3		65

Helicopter Movement				
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment
1	Bristow Helicopters	09:17 hrs / 09:46 hrs	10 / 10	Crew change
2	Bristow Helicopters	15:42 hrs / 16:24 hrs	0 / 0	Freight - Fishing Tools