

22 Oct 2009

 From: John Mcgarrity/ Peter Dane
 To: Texas Richards

DRILLING MORNING REPORT # 22
Trefoil-2

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\$613,578
Rig	Kan Tan IV	Days from spud	16.67	Shoe MDBRT	930.0m	Cumul. Cost	US\$17,569,036
Wtr Dpth(MSL)	69.0m	Days on well	21.13	FIT/LOT:	/ 15.15ppg		
RT-ASL(MSL)	26.0m	Planned TD MD	3221.0m	Current Op @ 0600	Running 9.625" casing. Depth at 06:00 hrs 1744m.		
RT-ML	95.0m	Planned TD TVDRT	3221.0m	Planned Op	Complete running 9.625" casing. Rig down 9.625" casing equipment. Rig up 5" drill pipe handling equipment. Run 9.625" casing hanger on 5" HWDP. Land the casing hanger in the 18.75" wellhead. Circulate 1.5 times casing volume. Cement and displace 9.625" casing.		

Summary of Period 0000 to 2400 Hrs
Circulated well clean. POOH to surface and racked back BHA. Made up Drill-Quip multi-purpose retrieval tool. RIH. Jet wellhead and retrieved wear bushing. Rigged up and run 9.625" casing.

HSE Summary				
Events	Num. Events	Days Since	Descr.	Remarks
Abandon Drill	1	5 Days	Held abandon drill	
ER Exercises		5 Days	International Ship and Port Facility - Drill	
Fire Drill	1	10 Days	Main deck - Fire in rubbish container	
Flash Reports	1	1 Day	Dumping of sand traps.	
Permit To Work	15	0 Days	Permits administered	
Pre-tour Meeting	2	0 Days	Shift change meetings	
Safety Meeting	2	4 Days	Held 2 x General Safety Meeting	
STOP Card	33	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 22 Oct 2009							
Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P11	P	F4	0000	0100	1.00	2520.0m	Circulated bottoms up.
P11	P	P3	0100	0130	0.50	2520.0m	Spotted 40 bbls hi-vis pill on bottom. Pumped slug. Flow checked well. Well static.
P11	P	G8	0130	0500	3.50	2520.0m	POOH dry from 2520m to 930m at 15 stands/hr.
P11	P	P3	0500	0600	1.00	2520.0m	Flow checked well at shoe. Well static. Concurrently serviced rig.
P11	P	G8	0600	0630	0.50	2520.0m	Pulled out of hole from 930m to 355m at 20 stands/hr.
P11	P	P3	0630	0700	0.50	2520.0m	Flow checked well prior to pulling BHA through BOP. Well static
P11	P	G8	0700	0730	0.50	2520.0m	Pulled out of hole from 355m to 252m.
P11	P	G6	0730	0900	1.50	2520.0m	Removed diverter packer and drill pipe wiper. Pulled out of hole with BHA to surface.
P11	P	G6	0900	1000	1.00	2520.0m	Removed bit and drained motor. 12.125" motor sleeve was measured 1/16" under

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P11	P	G12	1000	1200	2.00	2520.0m	gauge at surface. Checked mud motor - in spec. Checked 12.25" string stablisers, both in gauge. Down loaded MWD tools all data received. 2 plugged nozzles in bit, but still in good condition. IADC bit grade 1-1-CT-A-X-I-PN-TD. Made up Dril-Quip MPT retrieval tool and RIH. Washed the wellhead with the jet sub at 800 gpm, 250 psi. Retrieved the wear bushing. POOH and laid down wear bushing and MPT. Dril-Quip obtained index measurement for casing hanger seat.
P13	P	G1	1200	1500	3.00	2520.0m	Held JSA. Rigged up to run 9.625" casing.
P13	TP (TP)	G1	1500	1730	2.50	2520.0m	Attempted to make up shoe track. Malfunction of casing equipment. Changed out 11.75" elevator inserts to 9.625" inserts.
P13	P	G9	1730	2400	6.50	2520.0m	Ran 9.625" casing to 830m. Filled pipe every 5 joints with mud.

Operations For Period 0000 Hrs to 0600 Hrs on 23 Oct 2009

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
P13	P	G9	0000	0600	6.00	2520.0m	Ran 9.625" casing from 830m to 1744m. Filled pipe every 5 joints with mud.

Operations For Period Hrs to Hrs on
Phase Data to 2400hrs, 22 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)	12	22 Oct 2009	22 Oct 2009	507.00	21.125	2520.0m

General Comments

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

Operational Comments	Ditch Magnets: 24 hour metal recovery - 0 grams. Total for section - 830.0 grams.
Operational Comments	Flash Report 040. Dumping of sand traps

WBM Data
Cost Today US\$ 13791

Mud Type:	KCl POLYMER	API FL:	3.2cc/30min	Cl:	44500mg/l	Solids(%vol):	4%	Viscosity	57sec/qt
Sample-From:	4	Filter-Cake:	1/32nd"	K+C*1000:	9%	H2O:	93%	PV	14cp
Time:	13:00 hrs	HTHP-FL:	9.0cc/30min	Hard/Ca:	380mg/l	Oil(%):		YP	32lb/100ft ²
Weight:	9.45ppg	HTHP-cake:	2/32nd"	MBT:	12	Sand:		Gels 10s	11
Temp:				PM:	0.3	pH:	9	Gels 10m	15
				PF:	0.2	PHPA:	2ppb	Fann 003	11
								Fann 006	13
								Fann 100	31
								Fann 200	36
								Fann 300	46
								Fann 600	60
Comment	Note: Cost is in AUD								

Bit # RR#3

Wear	I	O1	D	L	B	G	O2	R	
	1	1	CT	A	X	I	PN	TD	
Bitwear Comments:									
Size ("):	12.25in	IADC#	M432	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run	
Mfr:	REED	WOB(avg)	15.00klb	No.	Size	Progress	0.0m	Cumul. Progress	249.0m
Type:	PDC	RPM(avg)	110	8	13/32nd"	On Bottom Hrs	0.0h	Cumul. On Btm Hrs	13.6h
Serial No.:	222369	F.Rate	900gpm			IADC Drill Hrs	0.0h	Cumul. IADC Drill Hrs	20.0h
Bit Model	RSX616M	SPP	2850psi			Total Revs		Cumul. Total Revs	0
Depth In	2271.0m	HSI				ROP(avg)	N/A	ROP(avg)	18.31 m/hr
Depth Out	2520.0m	TFA	1.037						
Bit Comment									

BHA # 4							
Weight(Wet)	68340.00klb	Length	252.7m	Torque(max)	15000ft-lbs	D.C. (1) Ann Velocity	269fpm
Wt Below Jar(Wet)	36205.00klb	String	375000.00klb	Torque(Off.Btm)	6000ft-lbs	D.C. (2) Ann Velocity	0fpm
		Pick-Up	370000.00klb	Torque(On.Btm)	12000ft-lbs	H.W.D.P. Ann Velocity	176fpm
		Slack-Off	380000.00klb			D.P. Ann Velocity	176fpm

BHA Run Description

BHA Run Comment Hours on drilling jars = 139 hrs.

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.30m	12.25in		222369	8x13 Jets
Mud Motor	9.22m	9.63in		963448	Ported float installed
String Stab	1.86m	12.25in	3.00in	701049	
LWD Tools	12.08m	8.00in			
NM Drill Collar	4.80m	8.00in		246906	
String Stab	1.88m	12.25in	3.00in	231931	
Drill Collar	84.74m	8.25in	2.88in		
Drilling Jars	9.68m	8.00in		17621339	
Drill Collar	18.63m	8.25in	2.88in		
X/Over Sub	1.09m	6.75in			
HWDP	141.54m	5.00in	3.00in		

Bulk Stocks

Name	Unit	In	Used	Adjust	Balance
Rig Fuel	m3	0	20	0	307.0
Drill Water	m3	0	53	0	534.0
Pot Water	m3	45	36	0	198.0
Brine	m3	0	8	0	71.0
Barite	MT	0	0	0	149.7
Baradefoam-W300	can	0	0	0	9.0
Barolift	boxes	0	0	0	21.0
Bentonite	MT	0	0	0	48.2
Caustic Soda	pail	0	0	0	35.0
Lime	sx	0	0	0	4.0
Soda Ash	sx	0	0	0	56.0
Sodium Bicarbonate	25kg sx	0	0	0	39.0
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
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	/	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.
13.38	/	930.00m / 930.00m	

Personnel On Board	
Company	Pax
ADA	6
Maersk	43
GRN	4
OMS	15
Geoservices	4
Halliburton Cementers	2
Halliburton Directional Drilling	1
Halliburton	3
Halliburton (Baroid)	2
Fugro ROV	3
Dril-Quip	2
Swaco	1
PCS	6
Others	3
Total	95

Mud Volumes, Mud Losses and Shale Shaker Data				Engineer : Mike Lawrance / Kosta Georgiou			
Available	2939.0bbl	Losses	0.0bbl	Equipment	Description	Mesh Size	Comments
Active	293.0bbl	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	1290.0bbl	Dumped		Shaker 2	Brandt VSM 300	20 top/100bottom	
Slug	25.0bbl	De-Gasser		Shaker 2	Brandt VSM 300	20 top/100bottom	
Reserve	1271.0bbl	De-Sander		Shaker 3	Brandt VSM 300	20 top/100bottom	
Kill	60.0bbl	De-Silting Centrifuge	0.0bbl	Shaker 3	Brandt VSM 300	20 top/100bottom	
				Shaker 4	Brandt VSM 300	20 top/100bottom	
				Shaker 4	Brandt VSM 300	20 top/100bottom	

Marine									
Weather on 22 Oct 2009							Rig Support		
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Tension (klb)
10.0nm	13kn	209.0deg	1022.0mbar	12C°	1.2m	209.0deg	3s	1	268.0
Rig Dir.	Ris. Tension	VDL	Swell Height	Swell Dir.	Swell Period	Weather Comments		2	119.0
317.0deg	240000.00klb	86363.00klb	1.5m	209.0deg	5s			3	137.0
Comments								4	205.0
								5	139.0
								6	116.0
								7	189.0
								8	197.0

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks			
Far Scimitar			On location KT4	Item	Unit	Used	Quantity
				Rig Fuel	M3		508
				Potable Water	M3		520
				Drill Water	M3		196
					t		55
				Barite	t		0
				Bentonite	t		0
Brine	M3		165				
Far Fosna			South wharf port Melbourne	Item	Unit	Used	Quantity
				Rig Fuel	M3		324
				Pot Water	M3		463
				Drill Water	M3		362
				Bentonite	t		42
				Barite	t		20
					t		130
Brine	M3		65				