

06 Jan 2009 From: Sean De Freitas / Peter Sheehan

To: Paul Barrett

DRILLING MORNING REPORT # 28 Fermat-1

Well Data							
Country	Australia	MDBRT	3585.0m	Cur. Hole Size	8.500in	AFE Cost	AUD\$51,857,377
Field	Otway	TVDBRT	3580.4m	Last Casing OD	9.625in	AFE No.	07/002
Drill Co.	Seadrill	Progress	233.0m	Shoe TVDBRT	2797.7m	Daily Cost	AUD\$799,105
Rig	West Triton	Days from spud	24.00	Shoe MDBRT	2800.3m	Cum Cost	AUD\$31,477,680
Wtr Dpth (MSL)	39m	Days on well	28.00	FIT/LOT:	1.92sg /		
RT-MSL	38.00m	Planned TD MD	3640m	Current Op @ 0600			fter running back in hole
RT-ML	77m	Planned TD TVDRT	3640m		from 9.62	in casing shoe) .
				Planned Op	POOH. Run electi	ic line logs.	

Summary of Period 0000 to 2400 Hrs

Drilled 8.5in hole from 3352m to 3585m.

Circulated hole clean.

POOH to 9.625in casing shoe working clear tight spots.

HSE Summary				
Events	Num. Events	Days Since	Descr.	Remarks
Abandon Drill	1	2 Days	Abandon rig drill.	All personnel mustered at life boats.
JSA	6	0 Days	JSA's conducted for the day.	
Pre-tour Meeting	4	0 Days	Safety Meeting.	Held Pretour and pre job safety meetings with crews.
PTW issued	4	0 Days	PTW issued for the day.	
Safety Meeting	2	3 Days	Weekly safety meeting.	
STOP Card	31	0 Days	Stop cards submitted for the day.	23positive 8 negative

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

Phse	Cls (RC)	Ор	From	То	Hrs	Depth	Activity Description
P11	Р	D2	0000	1400	14.00	3585.0m	Drilled 8.5in hole from 3352m to 3585m. WOB 18Klbs, RPM 90, GPM 700, SPP 2900, TORQUE 2/10 K FT-LB. Varied drilling parameters in an attempt to reduce Stick/Slip at MWD without much success. Stick/Slip values remained high.
P11	Р	F4	1400	1530	1.50	3585.0m	Circulated hole clean. Took survey at TD - 3569.38MD, 7.3 deg Inc, 160.3 deg AZ.
P11	Р	G8	1530	1730	2.00	3585.0m	Flow checked well. POOH from 3585m. Overpull from 3539m to 3510m - 5/13klbs. Worked clear. Overpull from 3510m to 3480m - 10/25klbs. Worked clear. Overpull from 3480m to 3451m - 10/15klbs. Worked clear.
P11	Р	D6	1730	1800	0.50	3585.0m	Unable to work past 3415m with 30klbs overpull and taking weight going back down. Made up TDS and backreamed from 3415m to 3392m. After backreaming one time no drag or pull seen again. Backreamed with 550 GPM, SPP 2000, rpm 80, Max torque 14k ft-lb.
P11	Р	G8	1800	2000	2.00	3585.0m	POOH - straight pull on elevators from 3392m to 3081m. Worked clear tight spots of up to 20klbs overpull as required.
P11	Р	D6	2000	2130	1.50	3585.0m	Tight hole at 3081m to 2948m 15/20k overpull. Unable to work thru, made up TDS and backreamed. After backreaming one time no drag or overpull seen again. Backreamed with 550 GPM. SPP 2000. rpm 80. Max torque 14k ft/lb. No pressure increase or signs of packing of.
P11	Р	G8	2130	2200	0.50	3585.0m	POOH - straight pull on elevators from 2948m to 2900m. No excess drag.
P11	Р	D6	2200	2330	1.50	3585.0m	Tight hole at 2900m to 2830m. 15/20klbs overpull. Unable to work through. Made up TDS and backreamed. After backreaming one time no drag or overpull seen again. Pulled into shoe at 2800m.
P11	Р	G11	2330	2400	0.50	3585.0m	Serviced rig and TDS at shoe. Derrick man reported TDS washpipe leaking.

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



Phse	Cls (RC)	Op	From	То	Hrs	Depth	Activity Description
P11	TP (DH)	G8	0000	0100	1.00	3585.0m	RIH. Stabilisers hung up in float shoe 20klbs down weight. Reamed all stabilisers through float shoe. After reaming through one time with 40 RPM no signs thereafter when working stabilisers back through.
P11	Р	G8	0100	0300	2.00	3585.0m	RIH from 2280m to 3451m. Took weight at 3451m - 20klbs down weight.
P11	Р	F1	0300	0330	0.50	3585.0m	Made up TDS and broke circulation. Washed from 3451m to 3480m at 100 GPM. Took 5-10klbs weight to wash past.
P11	P	D6	0330	0500	1.50	3585.0m	Washed / light reamed from 3480m to 3576m. After connection at 3480m hole packed off. Broke string free and established full circulation. Washed and reamed from 3480m to 3576m. RPM 80, GPM 500, SPP 1900, Average torque 3/6k. Torque fluctuations up to 19k ft-lb. At each connection attempted to slack off without pump and rotary to check hole condition - no success, 15klbs drag.
P11	Р	F4	0500	0600	1.00	3585.0m	Hole packed off and drill string torqued up to stall out when attempting to ream past 3576m. Circulated bottoms up and cleaned hole at 720 GPM, 3150 psi. Significant increase in cuttings and cavings on bottoms up.

Operations For Period Hrs to Hrs on

Phase Data to 2400hrs, 06 Jan 2009										
Phase	Phase Hrs	Start On	Finish On	Cum Hrs	Cum Days	Max Depth				
Mob/Demob(P1)	78.5	10 Dec 2008	13 Dec 2008	78.50	3.271	0.0m				
Conductor Hole(P2)	28	13 Dec 2008	14 Dec 2008	106.50	4.438	119.0m				
Conductor Casing(P3)	26.5	14 Dec 2008	15 Dec 2008	133.00	5.542	119.0m				
Surface Hole(P4)	51	15 Dec 2008	17 Dec 2008	184.00	7.667	999.0m				
Surface Casing(P5)	20	17 Dec 2008	18 Dec 2008	204.00	8.500	999.0m				
BOPs/Risers(P6)	13	18 Dec 2008	19 Dec 2008	217.00	9.042	999.0m				
Intermediate Hole (1)(P7)	243	19 Dec 2008	29 Dec 2008	460.00	19.167	2807.0m				
Intermediate Casing (1)(P9)	112	29 Dec 2008	02 Jan 2009	572.00	23.833	2807.0m				
Production Hole (1)(P11)	100	02 Jan 2009	06 Jan 2009	672.00	28.000	3585.0m				

General Comments

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

Operational Comments

West Triton Rig Equipment Concerns

1) Need new BOP test tool mandrel. Ordered on the 24/10/08.
2) TDS IBOP is required to be opened before being able to operate rotating head and link tilt functions. Ongoing intermittent issue.

WBM Data					Cost To	day							
Mud Type:	KCI / Polymer	API FL:		5.2cc/30min	CI:	42	:000mg/l	Solids(%vol	l):	8%	Viscosity	50sec	
Sample-From:	6	Filter-C	ake:	1/32nd"	K+C*1000:		7%	Low-Gravity Solids:	/	2.6%vol	PV YP		20cp 40lb/100ft ²
Time:	15:00	HTHP-F	FL: 1	1.0cc/30min	Hard/Ca:		480mg/l				Gels 10s		12
Weight:	10.60ppg	HTHP-0	cake:	2/32nd"	MBT:		11.25	H2O:		89%	Gels 10m		26
Temp:	49C°				PM:		0.1	Oil(%):			Fann 003 Fann 006		11 14
					PF:		0.05	Sand:		.5	.5 Fann 100		36
							0.00	pH:		8.2	Fann 200		49
								PHPA:		2ppb	Fann 300 Fann 600		58 80
Comment		II.											
Bit # 6					Wear	I	O1	D	L	В	G	O2	R
					Bitwear Co	omments:							
Size ("):		8.50in	IADC#	M423	3 Nozzles Drilled over			ed over last	t 24 hrs	24 hrs Calculated over Bit Run			



Mfr:	Security	WOB(avg)	18.00klb	No.	Size	Progress	233.0m	Cum. Progress	778.0m
Type:	PDC	RPM(avg)	90	6	14/32nd"	On Bottom Hrs	10.3h	Cum. On Btm Hrs	42.4h
Serial No.:	11001928	F.Rate	700gpm			IADC Drill Hrs	14.0h	Cum IADC Drill Hrs	57.5h
Bit Model	SE3653Z	SPP	2900psi			Total Revs	57	Cum Total Revs	153
Depth In	2807.2m	HSI	4.86HSI			ROP(avg)	22.62 m/hr	ROP(avg)	18.35 m/hr
Depth Out		TFA	0.902						
Bit Comment		I .		1		1		1	

Bit Comment		1			1			
BHA # 6								
Weight(Wet)	34.00klb	Length		201.4m	Torque(max) 10000ft	-lbs D.C. (1) Ann Velocity	572fpm
Wt Below Jar(Wet)	28.00klb	String 283.00kll			Torque(Off.E	3tm) 4000ft	-lbs D.C. (2) Ann Velocity	0fpm
		Pick-Up		319.00klb	Torque(On.	3tm) 7000ft	-lbs H.W.D.P. Ann Velocity	408fpm
		Slack-Off		273.00klb			D.P. Ann Velocity	408fpm
BHA Run Description								
BHA Run Comment		Jar hours 42.	4					
Ec	quipment		Length	OD	ID	Serial #	Comment	
Bit			0.26r	n 8.50in		11001928		
Near Bit Stab			1.86r	n 8.80in	2.81in	228096		
ARC 6			5.83r	n 6.81in		2056		
Tele Scope			9.00r	n 6.75in		VC64		
SonicVISION 825			8.19r	n 6.88in		649		
ADN Tool			6.24r	n 6.81in		40778		
Drill Collar			93.28r	n 6.50in	2.88in			
Drilling Jars			9.89r	n 6.88in	2.75in	1416-1495	jar hr's 42.4	
Drill Collar			9.36r	n 6.50in	2.75in	66571-1		
X/O			1.22r	n 7.00in	2.81in	7148		

Survey								
MD	Incl	Azim	TVD	Vsec	N/-S	E/-W	DLS	Tool Type
(m)	(deg)	(deg)	(m)	(deg)	(m)	(m)	(deg/30m)	
3436.14	5.2	162.0	3432.40	-76.7	-76.7	-23.3	0.5	MWD
3525.24	6.4	158.4	3521.05	-85.1	-85.1	-20.1	0.4	MWD
3569.38	7.3	160.3	3564.87	-90.1	-90.1	-18.2	0.7	MWD

3.50in

5.50in

56.23m

Bulk Stocks					
Name	Unit	ln	Used	Adjust	Balance
Drill Water	MT	0	6	0	395.0
Rig Fuel	m3	75	26	0	236.0
POTABLE WATER	MT	14	20	7	345.0
Cement class G	MT	0	0	0	89.0
BLENDED CEMENT	MT	0	0	0	0.0
Bentonite	MT	0	0	0	4.0
Barite	MT	0	0	0	91.0
Brine	m3	0	0	0	107.0
Helifuel	ltr	0	468	0	3,766.0

Pu	ımps																
Pu	Pump Data - Last 24 Hrs							Slow Pump Data									
No.	Туре	Liner (in)	MW (ppg)	Eff (%)	SPM (SPM)	SPP (psi)	Flow (gpm)	Depth (m)	SPM1 (SPM)	SPP1FI (psi)	low1(gpr	n)SPM2 (SPM)	SPP2 (psi)		SPM3 (SPM)		Flow3 (gpm)
1	National / 14 P-220	6.50	10.60	97	60	2900	700	3300.0	20	520	117	30	640	175	40	800	233
2	National / 14 P-220	6.50	10.60	97	60	2900	700	3300.0	20	500	117	30	620	175	40	780	233
3	National / 14 P-220																

HWDP



Casing			
OD	LOT / FIT	Csg Shoe (MD/TVD)	Cementing
30 "	/	151.00m / 151.00m	
13.38	15.00ppg /	987.00m / 987.00m	
9.63	/ 16.00ppg	2800.27m / 2797.72m	

Personnel On Board					
Company	Pax				
ADA	4				
Seadrill	10				
Catering	8				
Seadrill Services	33				
Tamboritha	2				
Halliburton	2				
Halliburton - Cementing	2				
Baker Hughes Inteq	7				
Beach Petroleum Ltd	2				
Schlumberger MWD/LWD	3				
Dril-Quip	1				
Schlumberger (Wireline)	9				
Baker Oil Tools	2				
Total	85				

Mud Volumes, Mud Losses and Shale Shaker Data Engineer:									
Available	1567.0bbl	Losses	116.0bbl	Equipment	Description	Mesh Size	Comments		
Active	478.0bbl	Downhole	0.0bbl	Shaker 1	VSM 300	145			
Mixing		Surf+ Equip	116.0bbl	Shaker 2	VSM 300	255			
ŭ			110.0001	Shaker 3	VSM 300	255			
Hole	739.0bbl	Dumped		Shaker 4	VSM 300	145			
Slug Reserve	350.0bbl	De-Gasser De-Sander							
Kill		De-Silter Centrifuge Behind casing							

Marine Weather on 06 Jan 2009 Air Temp. Visibility Wind Speed Wind Dir. Wave Height Wave Dir. Wave Period Pressure 1.0nm 9kn 135.0deg 1004.0mbar 15C° 0.5m 135.0deg 13s Rig Dir. Ris. Tension VDL Swell Height Swell Dir. Swell Period Weather Comments 128.5deg 4714.00klb 1.0m 190.0deg 13s mainly fine Comments

Vessel Name	Arrived (Date/Time) 19.40 03/01/09	Departed (Date/Time)	Status	Bulks							
Pacific Battler			On location Fermat - 1	Item	Unit	In	Used	Transfer to Rig	Adjust	Quantity	
				Rig Fuel	m3		3.7			373.8	
				Potable Water	m3		22			410	
				Drill Water	m3					266	
				Barite	Mt			42		0	
				CEMENT G	Mt						
				Bentonite	Mt			17		0	
				Brine	m3					0	
Pacific Valkyrie	14.53 06/01/09		On location Fermat - 1	Item	Unit	In	Used	Transfer to Rig	Adjust	Quantity	
				Rig Fuel	m3	155	7.4	75		345.7	
				Potable Water	Mt	175	5			394	
				Drill Water	m3	202				472	
				Barite	Mt			42		0	



			Item	Unit	ln	Used	Transfer to Rig	Adjust	Quantity
			Bentonite	Mt					38.5
			CEMENT G	Mt					65
			Brine	m3					
Flight #	Company	Arr/Dep. Time	Pax In/Out		Comment				
1	BRISTOW HELICOPTERS	1535 / 1557	3 / 1					Seadrill	