

**From:** Sean De Freitas / Peter Sheehan **To:** Rob Oliver 17 Dec 2008

### **DRILLING MORNING REPORT #8** Fermat-1

Well Data							
Country	Australia	MDBRT	999.0m	Cur. Hole Size	17.500in	AFE Cost	AUD\$51,857,377
Field	Otway	TVDBRT	999.0m	Last Casing OD	30.000in	AFE No.	07/002
Drill Co.	Seadrill	Progress	165.0m	Shoe TVDBRT	116.0m	Daily Cost	AUD\$710,460
Rig	West Triton	Days from spud	0.00	Shoe MDBRT	116.0m	Cum Cost	AUD\$13,849,596
Wtr Dpth (MSL)	39m	Days on well	8.00	FIT/LOT:	/		
RT-MSL	38.00m	Planned TD MD	3640m	Current Op @ 0600	00 0 1	cementing lin	es and preparing to
RT-ML	77m	Planned TD TVDRT	3640m		cement.		
				Planned Op	Cement casing. Install BOP's. Perform Junk run.		

# Summary of Period 0000 to 2400 Hrs

Drilled 17 1/2" hole to section TD 999m. POOH with drilling assembly. Picked up and RIH with 13 3/8" casing.

HSE Summary				
Events	Num. Events	Days Since	Descr.	Remarks
Abandon Drill	1	2 Days	Abandon rig drill.	All personnel mustered at life boats.
JSA	10	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	8	0 Days	PTW issued for the day.	
Safety Meeting	2	4 Days	Weekly safety meeting.	
STOP Card	22	0 Days	Stop cards submitted for the day.	21 positive 22 negative

## Operations For Period 0000 Hrs to 2400 Hrs on 17 Dec 2008

Phse	Cls (RC)	Ор	From	То	Hrs	Depth	Activity Description
P4	P	D2	0000	0530	5.50	999.0m	Continued to drill 17 1/2" hole from 824m to 999m.  WOB 15/23K  RPM 130/160  Torque 1/5k ft/lb  GPM 1200 . SPP 2450  Vary parameters to optimize ROP.  Swept hole with 50 bbls Hi Vis mid stand and prior to connections.  String wt up 143k, String wt down 140k.  Static losses at 895m = 167 bbl/hr approximate
P4	Р	F3	0530	0600	0.50	999.0m	Pumped and swept hole with 100 bbl HI-VIS mud while working drill string.
P4	Р	E5	0600	0630	0.50	999.0m	Attemped to down link with Schlumberger MWD tools - no success.  Observed 700 psi rapid pressure loss while down-linking MWD - equivalent to loosing one bit nozzle (circlip locked).
P4	P	F3	0630	0730	1.00	999.0m	Pumped and swept hole with second 100 bbl HI-VIS mud pills, circulated hole clean while working drill string.  Commenced displacing hole with HI-VIS mud.  After 410 bbls pumped observed sudden and total loss in pump pressure (surface equipment).  Shut down pumps, prepared to POOH.
P4	Р	G8	0730	1200	4.50	999.0m	POOH from 999m to 31m checking each connection for washout. Observed 50k overpull at 700m, worked thru twice and cleared. No further excess drag. Note: Maintained hole full by topping up 30" casing with sea water.
P4	P	G6	1200	1430	2.50	999.0m	Continued to POOH with 17 1/2" BHA. Inspected BHA: One jet nozzle missing from bit. Sonic shield missing from MWD tool. Note: Maintained hole full by topping up 30" casing with sea water.
P4	Р	G1	1430	1530	1.00	999.0m	Made up cement head and racked in derrick.  Note: Maintained hole full by topping up 30" casing with sea water.
P4	Р	G11	1530	1600	0.50	999.0m	Performed top drive service and inspection for loose objects.  Note: Maintained hole full by topping up 30" casing with sea water.



Phse	Cls (RC)	Ор	From	То	Hrs	Depth	Activity Description
P5	Р	G1	1600	1800	2.00	999.0m	Rigged up to run 13 3/8" casing. Held JSA & pre job toolbox meeting. Note: Maintained hole full by topping up 30" casing with sea water.
P5	Р	G9	1800	2400	6.00	999.0m	Ran 13 3/8" casing as per program to 725m midnight depth.  Bakerlocked shoe track and checked floats.  Note: Maintained hole full by topping up 30" casing with sea water.

#### Operations For Period 0000 Hrs to 0600 Hrs on 18 Dec 2008

Phse	Cls (RC)	Ор	From	То	Hrs	Depth	Activity Description
P5	Р	G9	0000	0130	1.50	999.0m	Continued RIH with 13 3/8" casing from 725m to 961m.  Note: Maintained hole full by topping up 30" casing with sea water.
P5	Р	G1	0130	0230	1.00	999.0m	Rigged down casing handling equipment. Rigged up 5 1/2" handling equipment.
P5	Р	G9	0230	0330	1.00	999.0m	Picked up and made up 18 3/4" wellhead assembly.
P5	Р	G9	0330	0400	0.50	999.0m	Continued to RIH from 961m to 969m. String taking 30k weight at 969m.
P5	Р	G9	0400	0500	1.00	999.0m	Made up top drive, broke circulation and washed down casing to shoe setting depth at 987m, 6 bbl/min, 177 SPP.
P5	Р	G9	0500	0600	1.00	999.0m	Pulled back and broke off drill pipe stand. Picked up and made up cement stand assembly. RIH with casing string and 18 3/4" wellhead assembly and stopped with wellhead landing collar 3" above 30" casing. Held pre cementing JSA and prepared to cement casing.

#### Operations For Period Hrs to Hrs on

Phase Data to 2400hrs, 17 Dec 2008						
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)	8	17 Dec 2008	17 Dec 2008	192.00	8.000	999.0m

#### **General Comments**

00:00 TO 24:00 Hrs ON 17 Dec 2008

West Triton Rig Equipment Concerns

#### **Operational Comments**

- 1) Cyber chair pressure gauges for the standpipe & choke manifolds require calibration.
- 2) Need new BOP test tool mandrel. Ordered on the 24/10/08.
  3) 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:	PHB	API FL	:		CI:			Solids(%vo	I):		Viscosity		488sec/qt
Sample-From: Time: Weight: Temp:	3 15:00 8.80ppg	Filter-C HTHP- HTHP-	FL:		K+C*1000: Hard/Ca: MBT: PM: PF:			Low-Gravity Solids: H2O: Oil(%): Sand: pH: PHPA:			PV YP Gels 10s Gels 10m Fann 003 Fann 006 Fann 100 Fann 200 Fann 300		10cp 76lb/100ft² 44 47 42 44 66 74 86
Comment											Fann 600		96
Bit # 2					Wear	I	01	D	L	В	G	02	R
						2	2	LT	G	Е	1	LN	TD
					Bitwear C	omments:		nozzle, no tooth on th				condition	
Size ("):	1	7.50in	IADC#	415	Noz	zles	Drille	ed over las	t 24 hrs	C	alculated	over Bit F	Run



Mfr:	HUGHES	WOB(avg)	7.00klb	No.	Size	Progress	165.0m	Cum. Progress	989.0m
Type:	tri	RPM(avg)	140	3	20/32nd"	On Bottom Hrs	3.6h	Cum. On Btm Hrs	21.2h
Serial No.:	6060161	F.Rate	1100gpm			IADC Drill Hrs	3.6h	Cum IADC Drill Hrs	21.2h
Bit Model	MXL-T00	SPP	1150psi			Total Revs	30	Cum Total Revs	163
Depth In	119.0m	HSI	3.45HSI			ROP(avg)	45.83 m/hr	ROP(avg)	46.65 m/hr
Depth Out	999.0m	TFA	0.920						
Bit Comment								I.	

BHA # 2							
Weight(Wet)	60.00klb	Length	174.8m	Torque(max)	3ft-lbs	D.C. (1) Ann Velocity	125fpm
Wt Below Jar(Wet)	58.00klb	String	141.00klb	Torque(Off.Btm)	2ft-lbs	D.C. (2) Ann Velocity	113fpm
		Pick-Up	143.00klb	Torque(On.Btm)	2ft-lbs	H.W.D.P. Ann Velocity	98fpm
		Slack-Off	140.00klb			D.P. Ann Velocity	98fpm

## BHA Run Description

### BHA Run Comment

DITA RUIT COMMENT					
Equipment	Length	OD	ID	Serial #	Comment
Bit	0.39m	17.50in		6060161	
Bit Sub	1.22m	9.50in	3.00in	SSSD7202	
Power Pulse	8.54m	9.75in		YX06	
LWD Tools	7.72m	10.00in		42793	
Stabiliser	2.17m	17.50in	3.06in	207A210	
Drill Collar	9.40m	9.50in	3.00in	16523	
Stabiliser	1.71m	17.50in	3.00in	205A37	
Drill Collar	18.86m	9.50in	3.00in		
X/O	1.22m	9.50in	3.00in	SSSD7125	
Drill Collar	47.24m	8.25in	2.88in		
Drilling Jars	9.68m	8.00in		1762-1380	
Drill Collar	9.46m	8.25in	2.88in	5T8	
X/O	0.93m	8.25in	2.81in	SSSD7132	
HWDP	56.23m	5.50in	3.00in		

Survey								
MD	Incl	Azim	TVD	Vsec	N/-S	E/-W	DLS	Tool Type
(m)	(deg)	(deg)	(m)	(deg)	(m)	(m)	(deg/30m)	
966.55	2.7	216.6	966.44	-2.5	-2.5	-3.0	0.4	MWD
990.90	2.3	226.4	990.77	-3.3	-3.3	-3.7	0.3	MWD

Bulk Stocks					
Name	Unit	In	Used	Adjust	Balance
Drill Water	MT	300	70	0	750.0
Rig Fuel	m3	3	7	0	251.0
POTABLE WATER	MT	12	21	0	240.0
Cement class G	MT	0	0	0	105.0
BLENDED CEMENT	MT	0	0	0	0.0
Bentonite	MT	0	8	0	42.0
Barite	MT	38	0	0	162.0
Brine	m3	0	0	0	184.0
Helifuel	ltr	0	387	0	2,803.0

Pυ	Pumps															
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)	SPP1Flow1(g	pm)SPM2 (SPM)	SPP2 (psi)		SPM3 (SPM)		Flow3 (gpm)
1	National / 14 P-220	6.50		97	70	2500	1200									
2	National / 14 P-220	6.50		97	70	2500	1200									



Pι	ımps														
Pump Data - Last 24 Hrs						Slow Pump Data									
3	National / 14 P-220	6.50	97												

Personnel On Board						
Company	Pax					
ADA	4					
Seadrill	11					
Catering	9					
Seadrill Services	35					
Tamboritha	2					
Halliburton	2					
Weatherford	6					
Halliburton - Cementing	2					
Baker Hughes Inteq	4					
Dril-Quip	2					
Beach Petroleum Ltd	2					
Schlumberger MWD/LWD	3					
Total	82					

Mud Volur Shaker Da	•	osses and Sh	nale	Engineer :			
Available	1298.0bbl	Losses	617.0bbl	Equipment	Description	Mesh Size	Comments
Active	275.0bbl	Downhole					
Mixing		Surf+ Equip	0.0bbl				
Hole Slug	47.0bbl	Dumped De-Gasser					
Reserve	976.0bbl	De-Sander					
Kill		De-Silter Centrifuge Sea Bed	617.0bbl				

Marine								
Weather on	17 Dec 2008							
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	
1.0nm	12kn	118.0deg	1002.0mbar	14C°	1.0m	135.0deg	13s	
Rig Dir.	Ris. Tension	VDL	Swell Height	Swell Dir.	Swell Period	Weather 0	Weather Comments	
128.5deg		2638.00klb	1.0m	190.0deg	13s	mainly fine		
		Comr	ments					

Vessel Name	Arrived (Date/Time)	Departed (Date/Time)	Status	Bulks							
Pacific Battler		16/15/08	Alongside Portland	Item	Unit	ln	Used	Transfer to Rig	Adjust	Quantity	
				Rig Fuel	m3	152.5	1	0	0	499.1	
				Potable Water	m3		3	0	0	450	
				Drill Water	m3		0			336	
				Barite	Mt	0	0	42	0	0	
				CEMENT G	Mt		0	0	2	84	
				Bentonite	Mt	0	0	25	0	17	
				Brine	m3	0	0	0	0	0	
Pacific Valkyrie	16/12/08		Standing by on location Fermat-1	Item	Unit	In	Used	Transfer to Rig	Adjust	Quantity	
				Rig Fuel	m3	0	2.72	150	0	413	
				Potable Water	Mt		10			369	
				Drill Water	m3	132		100	0	435	
				Barite	Mt	0	0	0	0	42	
				Bentonite	Mt	0	0	0	0	0	
				CEMENT G	Mt	0	0		0	0	



Helicopter Movement									
Flight #	Company	Arr/Dep. Time	Pax In/Out	Comment					
BWJ	BRISTOW HELICOPTERS AUSTRALIA PTY LTD	0932 / 0949	8 / 12	387 ltrs Fuel					