

# Fermat-1

## DAILY GEOLOGICAL REPORT

DGR 6

Date: Report Period: Days From Spud: Current Hole Size:	19 December 2008 06:00 – 06:00 hrs AEDT 5 444mm (17.5")	Licence / State: Rig: RT - SEAFLOOR: WATER DEPTH RT:	VIC/P46 Seadrill: West Triton 76.7m 38.7 m MSL 38.0 m MSL
Depth @ 06:00 Hrs EST:	999m MDRT 999m TVDRT -961m SS	PTD: Spud Date:	4000.0 m MDRT 14 December 2008
24 Hr Progress: 06:00 – 06:00 EST <u>Current Operation:</u>	0m RIH with 311mm (12.25") junk (	clean out assembly	
AFE Cost (Drill)\$	(C&S)\$ (P&A)\$		Cost To Date:

Casing Data	Hole Size	Depth	Casing Size	Wt:	Туре	Shoe Depth	LOT
1	914 mm (36")	119m	762mm (30")		X52	116m	
2	444mm (17.5")	999m	340mm(13.375")	68lb/ft	NT80HE	987m	

Mud Data	Туре:	Wt:	Visc:	WL:	PH:	KCI:	CI -:	PV/YP:	Rmf

Bit Data	No.	Make	٦	уре	Size	Hours	Meters	Condition
Last	2	Hughes	Rock	MXL-T00	444mm (17.5")	21	880	2 2 LT G E I LN TD

Surveys	Туре	MD (m)	Inclination	Azimuth (T)	TVD (m)	Offset (m)	Direction (T)
28	MWD	990.9	2.28	226.4	990.77	4.98	228.55

Fluid Loss	Interval MDRT	Total or Rate (bbl)	Remarks
Mud	999	Up to 160bbl/hr	Topping hole with SW – losses decreasing over time

### **OPERATIONS SUMMARY**

### Previous 24 hrs Operations Summary at 06:00 hrs AEDT

Cemented 340mm (13.375") casing. Bumped plug and held pressure. Bled off pressure – floats held. Adjust landing ring on wellhead – release running tool. POH and laid out running tool. Nippled up BOP. Increased tension on CTU. Nippled up riser, overshot, diverter and control lines – pressure tested surface lines. Function test BOP from Driller's, Koomey and Toolpusher's panels. Pressure tested 340mm (13.375") casing against shear rams. Run wear bushing. Made up 311mm (12.25") bit and junk run BHA. RIH to 126m. Picked up DP whilst RIH from 126m.

### Anticipated operations:

RIH. Drill out 340mm (13.375") casing. Work junk basket. Drill 999-1002m. Perform LOT. Drill ahead 311mm (12.25") hole +/-25m working junk basket. POH. P/U PDC bit and new 311mm (12.25") drilling assembly.



# Fermat-1

## DAILY GEOLOGICAL REPORT

DGR 6

FORMATION TOPS								
FORMATION	ACTUA	L TOP	High / Low	High / Low	PROGNOSED TOP			
	(MDmRT)	(mSS)	Prognosis	Offset	(MDmRT)	(mSS)		
Heytesbury Group	76.7	-38.7	0m		76.7	-38.7		
Nirranda Group	492	-454	49m Low		443.0	-405.0		
Dilwyn Formation	576	-538	38m Low		538.0	-500.0		
Pember Mudstone	963	-925	15m Low		948.0	-910.0		
Pebble Point Formation					1028.0	-990.0		
Timboon Sandstone					1048.0	-1010.0		
Paarratte Formation					1223.0	-1185.0		
Skull Creek Mudstone					1703.0	-1665.0		
Nullawarre Greensand					1823.0	-1785.0		
Belfast C & B Mudstone					1878.0	-1840.0		
Belfast A Mudstone					2163.0	-2125.0		
Flaxman Formation					2938.0	-2900.0		
Waarre Formation Unit C					3228.0	-3190.0		
Waarre Formation Unit B					3533.0	-3495.0		
Waarre Formation Unit A					3588.0	-3550.0		
Eumeralla Formation					3988.0	-3950.0		
Total Depth					4000.0	-3962.0		

# HYDROCARBON SHOW SUMMARY

INTERVAL	LITHOLOGY & HYDROCARBON FLUORESCENCE	GAS
999m	No new formation drilled.	

GAS	MD (m)	Peak	Background	Chromatograph
Trip Gas				
Connection Gas				

## **GEOLOGICAL SUMMARY**

INTERVAL ROP (m/hr)	LITHOLOGY	GAS (Peak / BG) Composition %
999m	No new formation drilled.	

### **REMARKS:**

DGR 6 links to DDR 9

### LWD Offsets from Bit:

Memory data from Run 1 indicates the Sonic tool failed at 750m.

Geologists: Roman Leslie / Greg Clota