

### Trefoil-2

Date : 05 Nov 2009

Geology Report Number : 23

( associated DDR # 36 )

#### Well Details

Depth MDBRT:	2520.0m	Rig:	Kan Tan IV	Date:	05 Nov 2009
Depth TVDBRT:	2520.0m	Progress:	0.0m	Report Start:	0000
Depth TVDSS:	2494.0m	RTE agl:		Report End:	2400
Hole Size:	12.250in	GLE amsl:	0 (m)	Days On Location:	35.38
Hole Size Carbide:		Last Csg Size:	13.375in	Days since Spud:	30.67
Water Depth (MSL)	69.0m	Last Csg Shoe:	930.0m		
RT-ASL(MSL)	26.0m	F.I.T. / L.O.T.:	/ 15.15ppg		

#### Operations Summary

24hr Summary:	Continued trouble shooting on Top Drive System (TDS).
Forward Plan:	Continue trouble shooting on TDS, prepare 216 mm (8-1/2") Bottom Hole Assembly (BHA), run wear bushing, run RTTS and test casing patch.

#### General Comments

00:00 TO 24:00 Hrs ON 05 Nov 2009

##### Operational Comments

Geoservices: 2 Data engineers, 2 mudloggers, 2 sample catchers on board. Gas equipment calibrated 5 Nov 09.  
Sperry: 3 MWD engineers on board. Main and back up tool strings ready to go.

#### WBM Data

Mud Type:	KCI POLYMER	Flowline Temp:		Cl:	42500mg/l	Low Gravity Solids:		Viscosity	62sec/qt
Sample From:	2	MWD Circ Temp:		Hard/Ca:	380mg/l	High Gravity Solids:		PV	11cp
Time:	11:00 hrs	Glycol CP Temp:		MBT:	11	Solids (corrected):		YP	21lb/100ft <sup>2</sup>
Weight:	9.40ppg	Glycol:		PM:	0.5	H2O:	93%	Gels 10s	11
ECD TD:		Nitrates:		PF:	0.35	Oil:		Gels 10m	15
ECD Shoe:		Sulphites:		MF:	1.4	Sand:	.3 %	Fann 003	10
ECD Cuttings:		API FL:	4.2cc/30min	pH:	9	Barite:		Fann 006	11
KCI Equiv:	9%	API Cake:	1/32nd"	PHPA Excess:				Fann 100	23
								Fann 200	28
								Fann 300	32
								Fann 600	43

#### Shakers, Volumes and Losses Data

Engineer : Mike Lawrance / James Munford

Available	2776.1bbl	Losses	0.0bbl	Equip.	Descr.	Mesh Size	Hours
Active	734.5bbl	Downhole		Shaker 1	Brandt VSM 300	20 top/50 bottom	
Mixing	0.0bbl	Surf+ Equip	0.0bbl	Shaker 2	Brandt VSM 300	20 top/50 bottom	
Hole	1150.6bbl	Dumped		Shaker 3	Brandt VSM 300	20 top/50 bottom	
Slug		De-Gasser		Shaker 4	Brandt VSM 300	20 top/50 bottom	
Reserve	891.0bbl	De-Sander					
Kill		De-Silter					
		Centrifuge					

Comment

**Formation Tops**

Formation	Prognosed		Actual		Diff.	Thickness MD (m)	Pick Criteria
	MDBRT (m)	TVDSS (m)	MDBRT (m)	TVDSS (m)	+ / - TVD (m)		
Torquay Group	95.00	69.00	95.00	69.00	0.00	823.00	Sea floor
Lower Miocene Seismic Marker	904.00	878.00	918.00	892.00	-14.00	244.00	GR increase
Upper Angahook	1168.00	1142.00	1162.00	1136.00	6.00	169.00	GR decrease, res increase
Angahook Volcanics Equiv	1323.00	1297.00	1331.00	1305.00	-8.00	238.00	GR decrease, res increase
Lower Angahook	1564.00	1538.00	1569.00	1543.00	-5.00	281.00	GR decrease, res increase
Demons Bluff	1839.00	1813.00	1850.00	1824.00	-11.00	255.00	Res increase
Eastern View Coal Measures	2092.00	2066.00	2105.00	2079.00	-13.00	0.00	Res decrease

**06:00 Hrs Update**

Time:	06:00 Hrs on 06 Nov 2009
Depth:	2520 mMDRT/2520 mTVDRT
Progress Since Midnight (m):	0
Status @ 0600hrs:	Cont to Troubleshoot top Drive hyd system & Pipe handler & alignment problems. Preparing 8 1/2 BHA.
Formation:	Eastern View Coal Measures
Lithology:	No drilling
ROP:	No drilling
Gas:	No drilling

**Wellsite Geologist(s)**

(Days) - Dennis Archer

(Nights) - Larissa Hansen