

### Trefoil-2

Date : 04 Nov 2009

Geology Report Number : 22

( associated DDR # 35 )

#### Well Details

|                    |          |                  |            |                   |             |
|--------------------|----------|------------------|------------|-------------------|-------------|
| Depth MDBRT:       | 2520.0m  | Rig:             | Kan Tan IV | Date:             | 04 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: | 34.38       |
| Hole Size Carbide: |          | Last Csg Size:   | 13.375in   | Days since Spud:  | 29.67       |
| 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: | Successfully installed casing patch. Commenced pressure tested BOPs.              |
| Forward Plan: | Complete pressure test on BOPs, trouble shooting Top Drive System (TDS) problems. |

#### General Comments

00:00 TO 24:00 Hrs ON 04 Nov 2009

|                             |  |
|-----------------------------|--|
| <b>Operational Comments</b> | 2nd WSG on board   |
| <b>Operational Comments</b> | Geoservices: 2 Data engineers, 2 mudloggers on board. Gas equipment calibrated 23 Oct 09, new calibration to be done prior to drill out with 216 mm (8-1/2") string.<br>Sperry: 3 MWD engineers on board. Main and 1st back up tool string for 216 mm (8-1/2") hole section ready to go. CTN for 2nd back up string failed testing, undergoing trouble shooting. |

#### WBM Data

|                       |                     |              |           |                      |           |                         |
|-----------------------|---------------------|--------------|-----------|----------------------|-----------|-------------------------|
| Mud Type: KCI POLYMER | Flowline Temp:      | CI:          | 42500mg/l | Low Gravity Solids:  | Viscosity | 62sec/qt                |
| Sample From: 2        | MWD Circ Temp:      | Hard/Ca:     | 400mg/l   | High Gravity Solids: | PV        | 12cp                    |
| Time: 11:00 hrs       | Glycol CP Temp:     | MBT:         | 10        | Solids (corrected):  | YP        | 21lb/100ft <sup>2</sup> |
| Weight: 9.40ppg       | Glycol:             | PM:          | 0.3       | H2O:                 | Gels 10s  | 11                      |
| ECD TD:               | Nitrates:           | PF:          | 0.25      | Oil:                 | Gels 10m  | 14                      |
| ECD Shoe:             | Sulphites:          | MF:          | 1.25      | Sand:                | Fann 003  | 10                      |
| ECD Cuttings:         | API FL: 4.8cc/30min | pH:          | 9         | Barite:              | Fann 006  | 11                      |
| KCI Equiv: 9%         | API Cake: 1/32nd"   | PHPA Excess: |           |                      | Fann 100  | 22                      |
|                       |                     |              |           |                      | Fann 200  | 28                      |
|                       |                     |              |           |                      | Fann 300  | 33                      |
|                       |                     |              |           |                      | Fann 600  | 45                      |

#### Shakers, Volumes and Losses Data

Engineer : Mike Lawrance / James Munford

| Available | 2775.8bbl | Losses      | 0.0bbl | Equip.   | Descr.         | Mesh Size        | Hours |
|-----------|-----------|-------------|--------|----------|----------------|------------------|-------|
| Active    | 734.2bbl  | Downhole    |        | Shaker 1 | Brandt VSM 300 | 20 top/50 bottom | 1     |
| Mixing    | 0.0bbl    | Surf+ Equip | 0.0bbl | Shaker 2 | Brandt VSM 300 | 20 top/50 bottom | 1     |
| Hole      | 1150.6bbl | Dumped      |        | Shaker 3 | Brandt VSM 300 | 20 top/50 bottom | 1     |
| Slug      |           | De-Gasser   |        | Shaker 4 | Brandt VSM 300 | 20 top/50 bottom | 1     |
| Reserve   | 891.0bbl  | De-Sander   |        |          |                |                  |       |
| Kill      |           | De-Silter   |        |          |                |                  |       |
|           |           | Centrifuge  |        |          |                |                  |       |

Comment

**Formation Tops**

| Formation                    | Prognosed |           | Actual    |           | Diff.         | Thickness MD (m) | Pick Criteria             |
|------------------------------|-----------|-----------|-----------|-----------|---------------|------------------|---------------------------|
|                              | MDVRT (m) | TVDSS (m) | MDVRT (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 05 Nov 2009            |
| Depth:                       | 2520 mMDRT/2520 mTVDRT              |
| Progress Since Midnight (m): | 0                                   |
| Status @ 0600hrs:            | Troubleshooting top Drive problems. |
| Formation:                   | Eastern View Coal Measures          |
| Lithology:                   | No drilling                         |
| ROP:                         | No drilling                         |
| Gas:                         | No drilling                         |

**Wellsite Geologist(s)**

(Days) - Dennis Archer

(Nights) - Larissa Hansen