



Wellbore History

GENERAL

The Delta discovery, made by well 33/9-6 in 1976, is situated approximately 4.5 km east of the Murchison platform. Well 33/9-6 had good oil shows, but was not tested due to mechanical problems. An oil down-to at 2998 m TVDSS corresponding to the top Mid Ness shale was seen in the well. The well had moderate reservoir quality within the Tarbert/Ness Formations, and excellent reservoir quality within the water-bearing Etive Formation.

Appraisal well 33/9-21 S confirmed the reservoir properties found in 33/9-6 and with an OWC in the Etive Formation.

The horizontal sidetrack 33/9-21 A was drilled to further appraise the oil-bearing sands.

The well was drilled from the Murchison Platform on the UK side of the border, where the well name is UK211/19a-M75y.

OPERATIONS AND RESULTS

After two unsuccessful attempts to kick off appraisal well 33/9-21 A was finally kicked off on 17 April 2009 at 5185 m (2687 m TVD SS) in well 33/9-21 S. Kick-off point was in the Shetland Group. The well was drilled as a horizontal producer and reached TD at 6392 m (2971 m TVD SS) in the Late Jurassic Heather Formation. The well was drilled with Versaclean oil based mud from kick-off to TD.

Top target reservoir came in at 5902 m (2970 m TVD SS). The well penetrated 465 m MD of Tarbet and Ness sands and it became evident that the reservoir dipped downwards so that the Etive Formation came below the OWC. After drilling through the top of the reservoir back into the Heather Formation a second sidetrack was decided in order to reach the Etive sands within the hydrocarbon-bearing zone. Shows were reported as "no shows above OBM" throughout the well bore.

No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 30 April 2009 as an oil appraisal.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 33/9-21 A