

Wellbore History

GENERAL

Well 31/3-4 was drilled to test the Mantra prospect, ca 2 km northeast of the northern end of the Troll Field in the North Sea. The primary objective was to test Late Jurassic sandstones of the Sognefjord, Fensfjord and Krossfjord formations, secondary to test the Middle Jurassic Brent Group, tertiary to test injectite sands in the Paleocene.

OPERATIONS AND RESULTS

Wildcat well 31/3-4 was spudded with the semi-submersible installation Transocean Barents on 22 November 2013 and drilled to TD at 2122 m in the Middle Jurassic Etive Formation. The 9 7/8" pilot hole did not encounter any boulders or shallow gas. Due to severe mud losses in Ness Formation coal beds, the well did not fulfil the objective to drill through the complete Brent section, but all target reservoir levels were tested by the well. The well was drilled with seawater and bentonite sweeps down to 747 m, and with Glydril mud from 747 m to TD.

Reservoirs with good to excellent quality were found in Paleocene Lista Formation, Sognefjord Formation, Krossfjord Formation, and Fensfjord Formation and in the Brent Group. All target reservoirs were dry. Only very weak shows were described on a junk basket core from undifferentiated intra-Lista Formation sandstone at 1353 m, and on cuttings from the Sognefjord and Fensfjord formations.

A junk basket core was recovered from 1353 to 1353.4 m. No fluid sample was taken.

The well was permanently abandoned on 5 January 2014 as a dry well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 31/3-4