



Wellbore History

GENERAL

Well 35/11-18 was drilled to test the Syrah prospect on the Marflo Spur/Lomre Terrace, west of the Vega Field in the North Sea. The primary objective was to test the hydrocarbon potential in the Middle Jurassic Brent Group. The secondary target was to test the hydrocarbon potential in Intra Heather Formation sandstone.

OPERATIONS AND RESULTS

Wildcat well 35/11-18 was spudded with the semi-submersible installation Borgland Dolphin on 19 August 2015 and drilled to TD at 3759 m (3740 m TVD) in the Early Jurassic Cook Formation. The Syrah 35/11-18 well was planned and executed as a vertical well with short deviated section below ca 3000 m through the main reservoir targets. The deviation was ca 15° from ca 3300 m to TD. No significant problem was encountered in the operations. The well was drilled with seawater down to 494 m, with KCl/Polymer/GEM mud from 494 m to 1111 m, with Performadril mud from 1111 m to 1742 m and with Innovert NS oil based mud from 1742 m to TD.

Top Draupne Formation was encountered at 3037 m and top Heather Formation came in at 3098 m. An Intra Heather Formation sandstone unit was penetrated from 3205 to 3247 m. The unit has ca 5 m gross hydrocarbon-filled sandstone in two sandstone beds on top, otherwise it consists of siltstone, claystone and limestone. Top Tarbert Formation came in at 3491 m with hydrocarbons in the topmost few meters. The Ness and Etive formations were water wet. Top Oseberg Formation came in at 3657 m with oil in the top 2 meters. Weak oil shows were described on the core from the Tarbert Formation down to 3550 m, and on cuttings over the interval 3657 to 3664 m.

One 54 m core was cut from 3498 m to 3552 m in the Middle Jurassic Tarbert - Ness formations. MDT fluid samples were taken at 3498.0 (hydrocarbons), 3540.2 m (water), 3603.5 m (water), 3657.0 m (hydrocarbons) and 3661.7 m (water)

The 35/11-18 well bore was plugged back for sidetracking and permanently abandoned on 27 September. It is classified as an oil discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 35/11-18