

Wellbore History

GENERAL

Well 16/3-U-1 was drilled on the south-eastern end of the Johan Sverdrup Field on the Utsira High in the North Sea. The reservoir in this part of the field is below seismic resolution. The primary objective was to investigate sand presence, thickness and quality. Side-tracks were planned to further investigate horizontal well drilling and high angle hole time-stability in Draupne shales.

OPERATIONS AND RESULTS

Well 16/3-U-1 was spudded with the semi-submersible installation Deepsea Atlantic on 13 December 2016 and drilled to TD at 2005 m (1999 m TVD) m in Basement rocks. The well was designed with open hole below the 13 3/8" casing shoe at 1119 m in the Hordaland Group. This allowed for reservoir logging at TD to be extended to the overburden. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to down to 1130 m and with Carbosea oil-based mud from 1130 m to TD.

The Draupne Formation was encountered at 1938 m (1932 m TVD), the Intra-Draupne Formation sandstone at 1950 m (1944 m TVD), and top Basement at 1959 m (1953 m TVD). The Intra-Draupne Formation sandstone had excellent reservoir properties and was oil-filled all through. No oil shows were described outside of the oil-bearing reservoir. Pressure data show ca 0.9 bar depletion in the reservoir compared to the pressure in well 16/3-5 in January 2013. Pressure data and logs in the overburden show no indication of flow potential.

One core was cut from 1943 to 1962 m in Draupne shale, sandstone and into basement. An RCX oil sample was taken at 1958.2 m.

The well was plugged back for side-tracking on 24 December 2016.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 16/3-U-1