



Wellbore History

GENERAL

Well 16/2-16 was drilled on the northeastern part of the Johan Sverdrup Field on the Utsira High. The main objective was to acquire information about the Jurassic reservoir properties and hydrocarbon column in this part of the field. Secondary objectives were to investigate the reservoir properties of the Zechstein Group, and to determine whether oil-bearing Paleocene sandstones (Heimdal and Hermod formations) were present.

OPERATIONS AND RESULTS

Well 16/2-16 was spudded with the semi-submersible installation Transocean Winner on 11 November 2012 and drilled to TD at 2214 m in the Permian Rotliegend Group. A 9 7/8" pilot hole was drilled to a total depth of 706 m to check for shallow gas before opening up the pilot hole to 36" and 26" sections. No shallow gas was observed. No significant problem was encountered in the operations. The well was drilled with seawater and bentonite mud down to 695 m and with Glydril mud from 695 m to TD.

No Paleocene sands were present in the well. In total 15 m of net sandstone was found within a 60 m Jurassic sequence. The top of the reservoir was penetrated at 1950 m as prognosed. The oil/water contact was identified at 1952 m just above the good reservoir sand. This is the same level as observed in well 16/2-13 A and 3 m deeper than found in previously drilled wells in PL 501. The 6 m thick Intra Draupne Formation sandstone below the contact sand had good shows. A 3 m thick sandstone in the Vestland Group had similar, but weaker shows; otherwise, no shows were reported from the well. The Zechstein Group consisted of water-wet sandstones, limestones and siltstones with a water gradient in line with the above Jurassic sandstones.

Two successive cores were cut from 1947 m in the lower Draupne Formation and down to 1986.8 m in the Statfjord Group. Oil and water samples were collected using MDT. Water was sampled at 1952.1 and 1966.0 m. At 1951.6 m, formation water, mud filtrate and oil were sampled with 68 bars drawdown.

The well was plugged back and completed for sidetracking on 12 December 2012. It is classified as an oil appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 16/2-16