



Wellbore History

GENERAL

The Zidane 6507/7-14 S well was drilled on the Revfall Fault Complex on the Dønna Terrace in the Norwegian Sea,

The primary objective was to test the hydrocarbon potential in the Middle Jurassic Fangst Group; Garn and Ile Formations. Secondary objectives were to test the hydrocarbon potential the Lower Cretaceous Lange Formation sandstone and the Lower Jurassic Tilje Formation.

OPERATIONS AND RESULTS

Wildcat well 6507/7-14 S was spudded with the semi-submersible installation Bredford Dolphin on 26 September 2010 and drilled to TD at 4534 m (4477.5 m TVD) in the Early Jurassic Tilje Formation. No significant problems were encountered in the operations. The well was drilled with seawater and sweeps down to 1301 m, with Performadril water based mud from 1301 m to 2200 m, with HT Performadril mud containing 4.5 - 7% glycol from 2200 m to 3289 m, and with XP-07 oil based mud from 3289 m to TD.

The Fangst Group, Garn Formation was encountered at 4219 m (4163.7 m TVD).The well proved a gas column in the Garn and Ile Formations with a gas down-to contact at 4381 m (4325 m TVD). The Garn Formation is 87 m thick and consists predominantly of sandstone. The Ile Formation is 65 m thick, consisting of interbedded sandstone, claystone and siltstone with poor reservoir properties. Lange Formation sandstone was encountered but proved only some residual gas. The Tilje Formation sandstone was water bearing. Weak oil shows in the form of light-coloured fluorescence were recorded in the gas-bearing reservoir; otherwise there were no oil shows reported from the well.

A core was cut from 4221 to 4275.6 m. Core depths should be shifted 2.7 m down as compared to loggers' depth. Plug data from the one-metre ends was available at the time of testing and these showed large permeability contrasts with some intervals having permeability of several hundred milliDarcy. Wire line fluid samples were acquired at 4226.45 m (gas), 4483.62 m (water), 4365.2 m (gas, gas+filtrate in one sample).

The well was permanently abandoned on 26 September 2010 as a gas discovery.

TESTING

The well was production tested (DST). The test produced 1200 000 Sm3of gas, 47 Sm3 condensate, and 16 m3 water (condensed water) per day through a 36/64 inch choke. The gas was very dry with a separator GOR of 22600 Sm3/Sm3, a gravity of 0.647 (air = 1) and 4.5% CO2. The maximum temperature recorded was 154 deg C, but due to high draw-down the initial reservoir temperature was estimated by different extrapolation techniques to be 151degC.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6507/7-14 S