



Wellbore History

GENERAL

The 7222/11-1 Caurus well was drilled on the Bjarmeland Platform in the Barents Sea. The objective of the well was to prove hydrocarbons in the Caurus prospect in prognosed reservoir intervals in Snadd Formation of Carnian age and in Kobbe formation of Anisian age.

OPERATIONS AND RESULTS

A pilot hole, 7222/11-U-1, was drilled 13 m south-west of the main well location. No shallow gas was found in the pilot hole.

Wildcat well 7222/11-1 was spudded with the semi-submersible installation Polar Pioneer on 24 August 2008 and drilled to TD at 2658 m (2625 m TVD) in the Middle Triassic Kobbe Formation. The 8 1/2" hole was drilled to 2082 m where the well started to lose mud to the formation due to drilling induced fractures, which were observed on the FMI logs. The well was plugged back, and a technical sidetrack T2 with reduced mud weight was drilled from 1252 m to TD. A second technical sidetrack T3, was drilled to core the Kobbe Formation. The well was drilled with seawater and hi-vis pills down to 606 m and with Glydril WBM from 606 m to TD.

The Caurus well penetrated a Quaternary section of 72 m and a Jurassic section of 185 m before drilling into rocks of Triassic age, Snadd Formation, at 636 m. The well proved gas in two levels in the Snadd Formation; in two thin sandstones of Early Norian age at top Snadd level, and in sandstones of Late Carnian age at 771 m with a gas/water contact at 785 m. Good oil shows were seen under the contact from 788 to 798 m. The gas bearing Snadd Formation sandstones had very good reservoir properties. In the Kobbe Formation oil and gas was found at two levels; oil in channelized sandstones of Anisian age at 2112 to 2115 m with weak oil shows from 2115 to 2142 m, and gas and oil in marine sandstones of Anisian age at 2210 to 2238 m with a gas/oil contact at 2233.2 m (2177.5 m TVD MSL). The oil and gas bearing Kobbe Formation sandstones had poor permability. Weak oil shows were seen from 2541 to 2559 m.

Three cores (core 1-3) were cut in the intervals 778 to 807 m and 1287 to 1299.5 m in the main wellbore, and two in 7222/11-1 T3 in the interval 2209.5 to 2243.8 m (core 4-5). In the shallow Snadd reservoir gas samples were collected at 643.8 m and at 771.5 m. A water sample was collected at 789 m. All the Snadd samples were of excellent quality. In the Kobbe sand section two oil samples were collected at 2113.7 m, but due to poor reservoir conditions the oil samples had to be sampled with very high drawdown and well below the dew point. The sampling was performed at 2232 m and 2234 m, with the lowest possible flowing pressure, but the samples collected were not representative for the formation fluid. During sampling of oil free gas coned in from the gas zone above and during gas sampling oil coned in from the oil zone below.

The well was permanently abandoned on 4 November 2008 as an oil and gas discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7222/11-1