

FANGST GP TOP BAT GP TOP

1800

1900

2000

2100

MELKE FM TOP

MEFKENTADE

ÄRE FM TOP

INTRA MELKE FM SS TOP

## **Wellbore History**

## **GENERAL**

Well 6608/10-6 is located in the SE part of the block 6608/10. The main objective of the well was to prove hydrocarbons in Middle and Lower Jurassic sandstones.

## **OPERATIONS AND RESULTS**

The well was spudded on of February 29, 2000 with "West Navion" in a water depth of 414 m and drilled to a total depth of 2115 m in the Åre Formation. It was drilled with seawater and bentonite with hi-vis pills down to 1410 m, and with water based "Glydrill" mud (with 5% glycols) from 1410 m to TD.

The well penetrated rocks of Quaternary, Tertiary, Cretaceous and Jurassic ages. TD is in rocks of Early Jurassic age (Åre Formation). Neither the Garn, Ile nor the Tofte Formations were encountered. Two good reservoir zones were penetrated, the Melke Sandstone and the Åre Formation. A sandy Not Formation was also encountered, but did not have the same reservoir quality as the two previously mentioned. The reservoir sequence proved to be oil bearing. This was verified both by shows on cuttings and cores, logs, samples and laboratory studies of the cores. The main part of the oil bearing reservoir zone was cored. One MDT oil sample was retrieved from 1826.7 m in the Melke formation. Two MDT oil samples and a water sample were retrieved from 1910.5 m, 1940.5 m, and 1994.8 m, respectively, in the Åre Formation. The oil-water contact was encountered at 1994 m. The well was completed with a 7" liner through the reservoir to be able to perform a DST on a later stage. The well was suspended as an oil discovery.

The well was re-entered (6608/10-6 R) November 2000 with "West Navion". The 7" liner was perforated in two 4 m intervals in the Åre Formation. Four sets of independent pressure- and temperature gauges were installed above the perforated intervals. The objective of installing these gauges was to measure any possible communication between the water zones down flanks in the 6608/10-7 explorations well and the reservoir in well 6608/10-6R. The well was suspended 2 December 2000.

The well was again re-entered (6608/10-6 R 2) in August 2001 with "Borgland Dolphin". The pressure- and temperature gauges were retrieved and communication between 6608/10-7 and 6608/10-6 was verified. A production test was performed in the Melke Formation. The well then was permanently plugged and abandoned.

## **TESTING**

A production test was performed in the interval 1810 m to 1842 m in the Melke Formation. The produced fluid was characterized as oil and the final rate was 42 Sm3/d.