



## Wellbore History

### GENERAL

Well 6608/11-3 is located on the Dønna Terrace in the central part of block 6608/11. The main objective was to prove hydrocarbons in the Lower Jurassic sandstones of the Åre Formation; the secondary objectives were to prove hydrocarbons in the Upper Jurassic sandstones of the Melke Formation and to gain geological data from the Triassic Grey Beds Formation.

### OPERATIONS AND RESULTS

Well 6608/11-3 was spudded with the semi-submersible installation Stena Don on 26 November 2002 and drilled to TD at 2031 m in the Triassic Grey Beds. No significant problems were encountered during drilling. The well was drilled with seawater and h-vis sweeps down to 725 m and with KCl/PAC/glycol mud (GLYDRIL) from 725 m to TD. A class 2 shallow gas warning was issued prior to drilling the well, and the well was thus designed accordingly with the BOP set above the potential gas sands. No indications of shallow gas were seen on the MWD logs or in the gas/cuttings in this section. High pump rates resulted in non-representative cuttings samples due to heavy clay washout of the formation. This was particularly true for the Melke and Grey Beds Formations.

Reservoir zones were penetrated in the Melke, Tilje and Åre Formations, all of which proved to be water bearing. Good quality reservoir sands were also penetrated in the Triassic Grey Beds Formation. These were also water bearing. No shows were recorded in the well. Geochemical analyses of picked cuttings and SWCs indicated fair source potential in the Tare and Melke Formations, and good source potential in the Åre and Grey Beds Formations. The Late Jurassic Spekk Formation was not present in the well. Thermal maturity of the source rocks was evaluated using vitrinite reflectance and Tmax data. The entire section was found thermally immature. Only one sample from the Tare Formation (1420 m) had traces of hydrocarbons, mainly light hydrocarbons in the C14-C20 range.

One core (6.12 m recovered) was taken in the interval 1985 m to 1995 m in the Triassic Grey Beds Formation. Wire line logs showed a possible thin gas bearing sand (1416.5 m to 1419 m) in the Paleocene Tare Formation. A rush mobilization of MDT sampling equipment was done, with conventional sampling chambers. The sampling string included a 1-gallon and a 2 3/4-gallon chamber but the available equipment did probably not provide representative samples. Both chambers contained mud filtrate, water, and small amounts of dry gas. A total of 25 MDT pressure tests were acquired in the Tare, Melke, Åre, and Grey Beds Formations. The tests showed that the Tare Formation was weakly overpressured and not in communication with the underlying Jurassic sandstones.

The well was permanently abandoned as dry on 15 December 2002.

### TESTING

No drill stem test was performed

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6608/11-3