



Wellbore History

GENERAL

Well 15/6-5 was drilled in the north-eastern part of the Sleipner Field (Sleipner West). The objective was to confirm structural and stratigraphic interpretations as well as define the hydrocarbon content and contacts and the reservoir properties in this part of the Field.

The well is reference well for the Hugin Formation.

OPERATIONS AND RESULTS

Appraisal well 15/6-5 was spudded with the semi-submersible installation Drillmaster on 10 October 1977 and drilled to TD at 3824 m in Triassic sediments. No significant problems were encountered during the drilling of the well. Initial drilling from the sea floor to 166.5 m was with fresh water and lignosulphonate. Below this depth and down to 1197.5 m a seawater gel with carboxymethyl-cellulose (CMC) mud system was used. Below 1197.5 m the above mud with lignosulphonate was used.

The Hugin Formation (Upper Dogger Sandstone) was encountered at 3627 meters. This was six meters below the lowest gas seen in the main Sleipner reservoir to that date, 3597 m MSL in 15/9-1. The Hugin Formation is 53 meters thick in the well and essentially 100% sandstone. Electric log analysis and RFT pressure data show the section to be water bearing, although the presence of residual hydrocarbons down to 3655 m was indicated by bleeding gas and excellent liquid hydrocarbon shows in the cores. No hydrocarbon indications were present below 3655 m. The Sleipner Formation (Lower Dogger) came in at 3580 m with several massive coals beds. The well established that the potential lower limit of hydrocarbons in the main Sleipner reservoir was 3627 m (3603 m MSL).

Four conventional cores were cut from 3629 m to 3683 m in the Middle Jurassic sandstones (Dogger). Five FIT wire line fluid samples were taken between 3632.6 m and 3655.5 m. They all contained mud filtrate.

The well was permanently abandoned on 29 November 1977 as a dry well with shows.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/6-5