



Wellbore History

GENERAL

Well 34/10-9 R is a re-entry of well 34/10-9 on the central part of the Gullfaks Field. Well 34/10-9 drilled to 2200 m in the Early Jurassic Burton Formation and proved oil in the Brent Group and Cook Formation. The objective of the re-entry was to drill further to the Statfjord Formation and to conduct drill stem tests in the Brent Group and Cook Formation.

OPERATIONS AND RESULTS

Appraisal well 34/10-9 was re-entered with the semi-submersible installation Deepsea Saga on 29 May 1980 and drilled from 2200 m to final TD at 2421 m in the Nansen Member of the Early Jurassic Statfjord Formation. Drilling and testing were carried out without any specific problems. The well was drilled with a gel/lignosulphonate mud system from 2200 m to TD.

The Statfjord Formation proved to be water bearing.

Two cores were cut from 2400 m to 2405.5 m in the Nansen Member of the Statfjord Formation with 74% total recovery. No wire line fluid samples were taken.

The well was permanently abandoned 3 July 1980 as an oil appraisal well.

TESTING

Three drill stem tests were performed in the re-entry.

DST 1 tested the interval 2103 to 2109 m in the Cook Formation. The well produced 34.2 API oil at unstable conditions. The average flow rate on a 20/64" choke was 42 Sm³/day with a GOR of 69 Sm³/Sm³ and traces of water. The maximum temperature recorded down hole at the gauge was 84.4 deg C.

DST 2 tested the interval 2084 m to 2090 m in the Cook Formation. The test was aborted due to sand plugging and a new test, DST 2A, was conducted from the same interval after changing the initial sandscreen with perforated tubing. DST 2A produced 35.6 API oil at stable conditions. The flow rate on a 32/64" choke was 756 Sm³/day with a GOR of 65 Sm³/Sm³ and with no water. The maximum temperature recorded down hole at the gauge was 83.3 deg C.

DST 3 tested the interval 1904 to 1910 m in the Rannoch Formation. The well produced 32 API oil at stable conditions. The average flow rate on a 32/64" choke was 727 Sm³/day with a GOR of 62 Sm³/Sm³ and no water. The maximum temperature recorded down hole at the gauge was 76.8 deg C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 34/10-9 R