# **Formation Tops** Groups NORDLAND GP TOP 1000 TD (m) HORDALAND GP TOP 2000 ROGALAND GP TOP ₿₳Ŀ₽₣⋒₣₩₮₽ LISTA FM TOP VÅLE EM TOP EKOFISK FM TOP SHETLAND GP TOP HOP FIME GROFF BILDROWKIN FINITOP CROMER KNOLL GP TOP RØDBY FM TOP 000000

## **Wellbore History**

### **GENERAL**

Well 2/7-7, was drilled to appraise the southern part of the Eldfisk structure in North Sea. The primary objective was to test the Danian Limestone, expected to be about 120 m thick.

#### **OPERATIONS AND RESULTS**

Appraisal well 2/7-7 was spudded with the semi-submersible installation Ocean Viking on 2 January 1973 and drilled to TD at 3084 m in the Early Cretaceous Rødby Formation. The well was drilled with seawater and hi-vis sweeps down to 497 m and with gypsum/lignosulphonate mud from 497 m to TD. 4-6% diesel additive was used below 497 m.

The Danian Limestone was found to be highly fractured, only3 0 m thick, and yielded commercial quantities of oil and gas on one drill stem test. The Late Cretaceous, which was 195 m thick, was also found to contain hydrocarbons, and yielded commercial amounts of oil and gas on two out of three drill stem tests. The Danian Limestone and the upper part of the Late Cretaceous were thinner than expected due to a fault throwing Campanian on Turonian rocks.

No cores were cut and no fluid samples were taken.

The well was permanently abandoned on 29 March 1973 as an oil appraisal.

#### **TESTING**

Four intervals in the chalk section were perforated and tested

DST's 1 and 2 tested the interval 2911 to 2925. The interval gave a weak flow with headed oil + gas. The oil gravity was measured to 36.2 °API.

DST 3 tested the interval 2838 to 2905 m. The interval produced after acidizing 977 Sm3 oil and 387900 Sm3 gas /day through a 1.5 " choke. The GOR was 397 Sm3/Sm3, the oil gravity was  $36.8^{\circ}$ API, and the gas gravity was 0.7078 (air = 1).

DST's 4 and 5 tested the interval 2827 to 2833 m. The interval produced after acidizing 1024 Sm3 oil and 443400 Sm3 gas /day through a 1.5 " choke. The GOR was 433 Sm3/Sm3 and the oil gravity was 37°API.

DST 6 tested the interval 2789 to 2822 m. The interval produced after acidizing 1179 Sm3 oil and 497800 Sm3 gas /day through a 1.4" choke. The GOR was 422 Sm3/Sm3, the oil gravity was 35.8°API, and the gas gravity was 0.6883 (air = 1).

DST 2 (2911 to 2925 m) and DST 4 (2827 to 2833 m) were misruns due to leaks.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 2/7-7