



### GENERAL

Well 15/3-3 was drilled west of the Gudrun Terrace on the east flank of the North Sea Central Graben, about 4.5 km north-east of the 15/3-1 S discovery. The main objective of the 15/3-3 well was to appraise the complete Jurassic series up-dip of well 15/3-1 S drilled on the same structure in 1975.

Well 15/3-3 is type well for the Grid Formation.

### OPERATIONS AND RESULTS

Appraisal well 15/3-3 was spudded with the semi-submersible installation Pentagone 84 on 5 January 1979 and drilled to TD at 5115 m in the Triassic Skagerrak Formation.

Several water bearing sands with high porosity were encountered in the Tertiary section including the Grid, Heimdal and Ty formations. The Cretaceous had no reservoir sections and was drilled without gas shows. The Late Jurassic Draupne Formation was encountered at 4017 m. The Draupne Formation was 208 m thick and consisted of shales with only a few < 1 m sandstone beds. The Heather Formation was penetrated from 4225 to 4522 m and contained a main Intra Heather Formation sandstone from 4260 to 4369 m. This sandstone was gas and condensate bearing in the upper part down to a GOC at 4272 m. The Hugin Formation came in at 4522 m and then the Sleipner Formation at 4545 m. The Hugin Formation contained gas filled sandstone from 4522 to 4527 m. Several thinner sandstones with gas followed down to a main gas filled sandstone in the Sleipner Formation from 4588 to 4632 m. A second hydrocarbon filled Sleipner Formation sandy interval was penetrated from 4679 to 4693 m. The upper part down to 4687 m consisted of good sandstone, further down it was cemented.

The only oil shows in the well was rare pale yellow to greenish crush cut fluorescence on cuttings around 4100 m and on white - yellowish fluorescence on all cores.

Six conventional cores were cut in the Jurassic section all with full recovery. The three first were cut in the Heather Formation from 4262 to 4307 m (4264 to 4309.9 m logger's depth). The three last were cut in the Sleipner Formation (cored depth = loggers depth): Core 4 from 4547 to 4562 m; core 5 from 4851 to 4860 m; and core 6 from 4995 to 5004 m. Three RFT fluid samples were taken at 4262 m (gas and condensate), 4262.5 m (mud and traces of condensate), and 4261.5 m (condensate). Four FIT samples were taken at 5059.5 m (water), 4989.5 m (mud filtrate), 4626.5 m (gas and mud), and 4262 m (oil and gas).

The well was permanently abandoned on 9 August 1979 as a gas/condensate appraisal.

### TESTING

Two DSTs were performed through perforations in the 7" liner.

DST 1 tested 4967 - 4990 m with packer at 4957 m. It produced 4.3 m3 of salt water (125 g/l) with traces of gas in 11 hours.

DST 2 tested 4615 - 4632 m with packer at 4600 m. It produced 520000 m3 gas, 60 m3 41.5 deg API paraffinic condensate and 2.2 m3 water /day in 24 hours. The GOR was ca 8600 Sm3/Sm3.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 15/3-3