



GENERAL

Well 25/2-18 A is a geological sidetrack to 25/2-18 S, located on the Bjørgvin Arch, four kilometers south of the 25/2-10 S (Frigg Gamma Delta) oil/gas discovery and eight kilometers north of the Frøy field in the North Sea. The 25/2-18 S well discovered oil in the Middle Jurassic Hugin Formation, the Langfjellet prospect. The target for well 25/2-18 A was southeast of 25/2-18 S but within the same segment. The objectives for sidetrack 25/2-18 A was to confirm hydrocarbons in the Hugin and Sleipner formations and to perform a drill stem test (DST).

OPERATIONS AND RESULTS

Appraisal well 25/2-18 A was kicked off from the main bore below the 13 3/8" casing shoe at 1555 m. It was drilled with the jack-up installation Mærsk Interceptor to TD at 4066 m (3723 m TVD) m in the Early Jurassic Drake Formation. No significant problem was encountered in the operations. The well was drilled with Versatec oil based mud from kick-off to TD.

The Hugin Formation came in at 3698 m (3361 m TVD) and the Sleipner Formation came in at 3825.5 m (3486.3 m TVD). The well proved oil proved in the Hugin Formation with an “oil down to” contact at approximately 3768 m (3430 m TVD). A total of 63 m gross reservoir thickness with 53 m net reservoir distributed across two separate compartments was recorded. No shows were recorded on cuttings due to flushing by OBM. No significant change was observed in shows on sidewall cores going from an oil zone to water zone, indicating that also sidewall cores are flushed and shows masked by OBM.

No conventional cores were cut. A total of 17 MDT samples were acquired: 3 oil samples at 3701.5 m, 4 oil samples at 3715.4 m, 3 oil samples at 3742.2 m, 3 oil samples at 3765.8 m, 1 water sample at 3776.3 m, and 3 water samples at 3789.3 m.

The well was plugged back for sidetracking on 19 October. It is classified as an oil appraisal well.

TESTING

Two drill stem tests were conducted in the Hugin Formation.

DST 1 tested the interval 3741.5 to 3767.1 m. It produced 600 Sm3 oil and 86413 sm3 gas /day through a 40/64" choke. The gas contained 3.5 ppm H2S and 4% CO2. The GOR was 144 Sm3/Sm3. Maximum flowing temperature was 115.8 °C.

DST2 tested the interval 3713.7 to 3724.9 m. It produced 349 Sm3 oil and 51624 sm3 gas /day through a 32/64" choke. The gas contained 3.5 ppm H2S and 4% CO2. The GOR was 149 Sm3/Sm3. Maximum flowing temperature was 115.0 °C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 25/2-18 A