



## Wellbore History

### GENERAL

Well 7220/7-2 S was drilled to test the Skavl structure, a shallow rotated, down-faulted terrace within the Bjørnøyrenna Fault Complex in the Barents Sea. The prospect is located 5 km to the south of the 7220/8-1 Skrugard Discovery well. The primary objective was to explore and prove commercial quantities of hydrocarbons in the primary target (Fruholmen Formation) and the secondary target (Tubåen Formation). In order to reach both the targets, the well had to be drilled deviated through the reservoir section.

### OPERATIONS AND RESULTS

Pilot well 7220/7-U-2 was drilled to 462 m to check for shallow gas due to a shallow gas class 1 warning. No shallow gas was observed. Wildcat well 7220/7-2 S was spudded with the semi-submersible installation West Hercules on 2 October 2015 and drilled to TD at 1855 m (1761 m TVD) m in the Triassic Snadd Formation. The well was drilled deviated from 580 m to TD, and with a sail angle of about 30 °from ca 1000 m to TD. The well was drilled with spud mud down to 758 m and with low sulphate KCl/polymer/glycol mud from 758 m to TD.

The well penetrated Quaternary, Tertiary and Cretaceous claystones, as well as late Jurassic claystones. The Tubåen reservoir sandstones came in at 1119 m. In Tubåen Formation both oil and gas were proven, whereas only oil was proven in the Fruholmen Formation, Krabbe Member. Based on log data, a gas oil contact (GOC) is estimated to 1150 m (1120.5 m TVD), and based on log- and pressure data the free water level (FWL) is estimated to 1177 m (1143 m TVD) in the Tubåen Formation. In the Fruholmen Formation the deepest FWL is estimated to 1358 m (1299 m TVD), based on pressure data. Pressure data show two, possibly three separate oil gradients in the Fruholmen Formation.

Six cores were cut in the reservoir formations. A total of 95.2 m core was recovered in three cores in the interval 1130 to 1226 m in the Tubåen Formation, and 112.21 m core was recovered in three cores in the interval 1305.5 to 1369.5 m in the Fruholmen Formation. MDT fluid samples were taken at 1117.96 m (gas), 1132.45 m (oil), 1145.19 m (water), 1172.79 m (oil), 1250.16 m (oil), and 1368.1 m (water).

The well was permanently abandoned on 16 December 2013 as an oil and gas discovery.

### TESTING

No drill stem test was performed.

## LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7220/7-2 S