



Wellbore History

GENERAL

Well 6506/9-4 A is a geological side-track to well 6506/9-4 S, drilled on The Fogelberg Discovery on a small fault block on the Halten Terrace, north-northwest of the Smørbukk Field and northeast of the Morvin Field. The side-track was drilled up-flank to the crestal part of the structure where future production wells would be located. The primary objective of the side-track was to perform a DST and collect representative fluid samples.

OPERATIONS AND RESULTS

Appraisal well 6506/9-4 A was kicked off in 14" casing at 2201 m on 28 April 2018. It was drilled with the semi-submersible installation Island Innovator to TD at 4497 m (4458 m TVD) m in the Early Jurassic Tofte Formation. Low penetration rate was experienced in the Lange Formation shales in the 12 ¼" section. The well was drilled with RheGuard Prime oil-based mud from kick-off to TD.

The Garn Formation was encountered at 4289.5 m (4254 m TVD), 13.5 m shallower than prognosis and top Ile Formation was picked at 4350.5 m (4313.8 m TVD), 13 m shallower than the prognosis. Approximately 57 m TVD gross sandstone of moderate to high quality was encountered in the Garn Formation and 66 m TVD gross moderate quality sandstone in the Ile Formation. Both formations were gas bearing.

Shows in the form of cut fluorescence was observed in several Intra-Lange sandstones, but not significantly different from the fluorescence caused by the oil-based mud.

Two cores were cut in succession from 4288.9 to 4341 m in the Garn Formation. The core recovery was 80.04% and 98.38% fore core 1 and 2, respectively. The core-log depth shifts were +1.8m and +1.1 m for core 1 and 2, respectively. No fluid sample was taken on wire line.

The well was permanently abandoned on 13 July 2018 as a gas appraisal well.

TESTING

A drill stem test was conducted from the interval 4290.0 - 4325.0 m (4253.4-4287.4 m TVD) in the Garn Formation. Maximum production rate from the formation was 570 000 Sm³ of gas and 80 Sm³ of condensate per day through a 36/64 inches choke opening. The gas contains 6 ppm H₂S and 4-5% CO₂. The temperature recorded in the test was 153 °C.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6506/9-4 A