

## **Wellbore History**

## **GENERAL**

Well 6407/11-1 was drilled to test the Gunnvald prospect in the Froan Basin south-east of the Njord Field and south-west of the Draugen Field in the Norwegian Sea. The primary objective was to test migration of hydrocarbons into the Froan Basin, targeting the Tofte Formation as primary objective, and the Tilje Formation (Heidi prospect) as secondary

## **OPERATIONS AND RESULTS**

Wildcat well 6407/11-1 was spudded with the semi-submersible installation Deepsea Bergen on 17 November 2018 and drilled to TD at 2175 m in the Early Jurassic Åre Formation. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 967 m and with water-based KCl/GEM/Polymer mud from 967 m to TD.

The well penetrated top Spekk Formation at 1743 m overlying the Rogn Formation from 1771 to 1774 m. The Rogn Formation lie unconformably on the Tofte Formation at 1774 m, while top Tilje Formation came in at 1937 m. The Tofte Formation is 110 m thick with ca 75 metres effective reservoir sandstone of good to very good reservoir quality. The Tilje Formation is 105 m thick with ca 47 m of effective reservoir sandstone of mainly good to very good reservoir quality. All reservoir sections were water wet. Gas levels were generally low throughout the well and there were no petroleum odour. A weak oil show was noted on core #2 at 1971 m in the Rogn Formation: no petroleum odour, no oil stain, spotted, moderate, yellow direct fluorescence, slow cloudy white cut, bluish white residual ring. No visible residue was observed.

The interval from 1753 to 1787 m was cored in two cores. The cored section includes Spekk hot shale, Rogn sandstone and Tofte sandstone. Core recovery was 100% and 98% in cores #1 and #2, respectively. Core-log depth shift is +0.4 m for bot cores. No fluid sample was taken.

The well was permanently abandoned on 7 December 2018 as a dry well.

## **TESTING**

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6407/11-1