



Wellbore history

GENERAL

Well 6407/7-9 A was drilled to test the Njord North Flank 3 prospect about 6 km north of the producing Njord Field in the Norwegian Sea. The primary objective was to prove hydrocarbon potential in the Early-Middle Jurassic Tilje and Ile formations. The secondary objective was to test the hydrocarbon potential in the Åre Formation.

OPERATIONS AND RESULTS

Wildcat well 6407/7-9 A was kicked off on 20 September 2016, from 1110.7 m in the 13 3/8" casing in primary well 6407/7-9 S. The sidetrack was drilled with the semi-submersible installation Songa Delta to TD at 4960 m in the Early Jurassic Åre Formation. Operations proceeded without significant problems. The well was drilled with XP07 oil based mud from kick-off to TD.

Gas with traces of oil-range hydrocarbons was encountered in thin intra-Lange Formation sandstones in the interval 3644 to 3780 m. Top Ile Formation was penetrated at 3992 m (3365.1 m TVD). The Ile Formation had shows in the top from 3998 to 4008 m, but no mobile hydrocarbons were proven. A 195-metre TVD gas column was encountered in the Tilje Formation, from formation top to formation base, and a 140-metre TVD gas column from top Åre Formation to ca 4888 m (4097 m). The reservoir properties in the reservoirs are poor to moderate. No true oil-water contact was observed, only down-to contacts. Weak oil shows (fluorescence) are described below 4888 m in the Åre Formation as deep as 4977 m.

No cores were cut. MDT fluid samples were taken in the Ile Formation at 4326.1 m (water), and in the Tilje Formation at 4659.4 m (gas condensate). Isotubes to collect further gas, including in the Lange Formation, proved to contain only air and no formation gas.

The well was permanently abandoned on 16 October 2016 as a gas discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 6407/7-9 A