



Wellbore History

GENERAL

Well 7130/4-1 was drilled to test the Ørnen prospect on the Finmark Platform in the Barents Sea. The primary objective was to test the hydrocarbon potential of the Late Permian age Røye Formation spiculites. Secondary objective was to test the Ørn Formation carbonates. In a discovery case, the well had an option to target the deeper sandstones of the Carboniferous Soldogg Formation.

OPERATIONS AND RESULTS

Wildcat well 7130/4-1 was spudded with the semi-submersible installation Transocean Arctic on 22 November 2015 and drilled to TD at 3184 m in the Early Carboniferous Soldogg Formation. A 9 7/8" pilot hole was drilled from 382 to 588 m to look for shallow gas. No shallow gas or water flow was encountered. No significant problem was encountered in the operations. The well was drilled with seawater and hi-vis pills down to 588 m and with GEM/KCl mud from 588 m to TD.

The main target consisting of Late Permian Røye Formation spiculites and carbonates was encountered at 2055 m. The spiculite reservoir extended from 2055 to 2093.5 m, with a reservoir quality poorer than expected. Sampling registered only water with no indications of movable hydrocarbons. Only mineral fluorescence was reported at the wellsite. Further analysis of the core in the laboratory revealed traces of oil stain, bleeding oil, hydrocarbon odour and bright yellowish white direct fluorescence associated with fracturing and permeable laminae in the uppermost part of the 'Røye I' interval.

The secondary target, Permo-Carboniferous carbonates of the Bjarmeland Group, was encountered at 2231 m. The carbonates had minor hydrocarbon shows and poor reservoir characteristics. Subsequently, the well was deepened into the third target, the Lower Carboniferous sandstones of the Soldogg Formation, encountering moderate to good sands with a 5-metre gas column from 3029 to 3034 m.

Two cores were cut from 2045 m above the spiculite interval to 2096.5 m thus capturing the whole Røye spiculite interval. The core recovery was 100%. MDT fluid samples were taken at 2055.9 m (water), 3031.6 m (gas), and 3081.2 m (water).

The well was permanently abandoned on 8 January 2016 as a gas discovery.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7130/4-1