



Wellbore History

GENERAL

Well 7220/11-2 was drilled to appraise the 7220/11-1 Alta discovery on the southern part of the Loppa High. The well targeted formations of Permian-Triassic age comparable with the conglomerates encountered in the discovery well. The objectives were to confirm the reservoir model and prove presence of hydrocarbon columns and contacts similar to those established in the discovery well, 7220/11-1. The fluid was expected to be oil with a large gas cap. The gas-oil contact was expected at 1908 m TVD RKB and the free-water level at 1954 m TVD RKB.

OPERATIONS AND RESULTS

Appraisal well 7220/11-1 was spudded with the semi-submersible installation Island Innovator on 24 March 2015 and drilled to TD at 2050 m in Basement rocks. A 9 7/8" pilot hole was drilled after installing the 30" conductor casing to 601 m to check for shallow gas. No shallow gas was observed. No significant problem was encountered in the operations. The well was drilled with Seawater and hi-vis pills down to 599 m, and with Aquadril mud from 599 m to TD.

Top of the target reservoir was encountered at 1864 m. It consists of fine-grained sandstone, conglomeratic in the lower half, with dolomitic cement. It is of Middle Anisian to Olenekian age. It contains a 50-metre gas column in rocks with good to poor reservoir quality. The oil zone was in tight formation. Due to poor reservoir quality, the contacts in the discovery well could not be confirmed, but pressure measurements indicate a common fluid system. Top basement was penetrated at 1954 m. Oil shows were recorded in siltstone and sandstones throughout the Triassic section from Top Kapp Toscana Group and down to top reservoir section. Shows were further recorded throughout the reservoir section and down to 2032 m in the basement rocks.

Four cores were cut from the interval 1857 to 1962.5 m. Core recovery was 100% for core 1 to 3 and 98.7% for core 4. Depth shift to logs were between -1.5 to -1.6 for all cores. MDT fluid samples were taken at 1866.3 m (gas), 1915.1 m (gas), 1935.5 m (water), and at 1943.4 m (water).

Due to poor reservoir quality in the oil zone, a geological sidetrack was decided to confirm the presence of an oil leg on the western side of the Alta structure. The well was plugged back for sidetracking on 3 May 2015. It is classified as an oil and gas appraisal well.

TESTING

No drill stem test was performed.

LITHOSTRATIGRAPHY & HISTORY FOR WELL: 7220/11-2