

Wellbore History

GENERAL

Well 6407/4-2 was drilled on the Spinell South prospect in the Gimsan Basin on the Haltenbanken in the Norwegian Sea. The well was drilled down-dip of the discovery well 6407/4-1. The main well objectives were to appraise the 6407/4-1 discovery and test the produceability of the Garn Formation, to investigate for hydrocarbons in formations underlying the Garn Formation and to provide good quality wire line logs from the well. Planned TD was 4100 m TVD MSL (4123.5 m TVD RKB) or into the Early Jurassic.

OPERATIONS AND RESULTS

Appraisal well 6407/4-2 was spudded with the semi-submersible installation Transocean Leader on 14 February 2011 and drilled to TD at 4230 m in the Middle Jurassic Ile Formation. A shallow gas warning Class 1 was given for three levels down to 800 m. A 9 7/8" pilot hole was drilled down to 1020 m, no shallow gas was observed. No significant problem was encountered in the operations. The well was drilled with sea water and bentonite sweeps down to 1062 m, with Performadril WBM from 1062 m to 1930 m, and with XP-07 OBM from 1930 m to TD.

The Garn Formation was encountered at 4007 m, which was 13.6 m deeper than prognosed. The Ile Formation was encountered at 4143 m. The reservoir proved to be water bearing and based on results from MDT and core analysis also proved to have low produceability. Shows were recorded on the core from 4014 m to 4051.4 m. They were described as: moderate odour, patchy to uniform moderate to bright white to bluish and yellowish direct fluorescence, moderate to slow streaming cut and dull vellowish residual fluorescence.

A 54 m core was cut in the Garn Formation sandstone, with 85.2% recovery. MDT water samples were taken at 4013.5 m in the Garn Formation.

The well was permanently abandoned on 13 April 2011as a well with shows.

TESTING

No drill stem test was performed.