

Wellbore History

GENERAL

The Fongen prospect in PL380 is located northernmost in the Gimsan Basin, to the west of the Midgard Discovery on the Halten Terrace in the Norwegian Sea. Well 6407/2-4 was drilled to test the hydrocarbon and reservoir potential of the large Jurassic pre-rift fault block, named the Midgard West Block. The fault block is down faulted to the west with respect to the Midgard Horst. The primary target of the well was the shallow marine sandstones of the Garn Formation of Middle Jurassic age. Planned TD was TD 30 m into the first water bearing sandstone formation below the Garn Formation.

OPERATIONS AND RESULTS

Wildcat well 6407/2-4 was spudded with the semi-submersible installation Songa Delta on 23 July 2009 and drilled to TD at 3001 m, 30 m into the Middle Jurassic Ile Formation. After drilling to 17 1/2" TD at 1777 m operations were suspended in three hours due to a fire in the generator switch board. During drilling the interval 2630 m to 2800 m significant gas peaks from 1.5% - 9% was observed, matching connection depths. Peaks were regarded as formation gas during drilling, but later experiences on the well indicate that mud weight should have been increased.

The Garn Formation primary target was encountered at 2892 m, 19 m deeper than the prognosis. It proved to be 10.5 m thicker than the prognosticated thickness of 41 m. Petrophysical evaluation of the MWD logs showed that Fangst Group section penetrated by the well had porosities up to 30%, with 67 m net reservoir having 24% average porosity. Water saturation was 95-100% in the entire reservoir range, indicating no residual hydrocarbon saturation. A questionable show on cuttings at 2891 m could be due to the oil based mud, otherwise no fluorescence or oil stain was seen from the cuttings. Apart from gas peaks caused by low mud weight gas readings were very low throughout the reservoir section.

No cores were cut. No wire line logging was performed and no fluid samples were taken.

The well was permanently abandoned on 31 August 2009 as a dry well.

TESTING

No drill stem test was performed.

