NPD – exploration drilling result

16/12/2014 The Norwegian Petroleum Directorate has granted Det norske oljeselskap AS a drilling permit for wells 16/1-21 S and 16/1-21 A, cf. Section 8 of the Resource Management Regulations.

Wells 16/1-21 S and 16/1-21 A will be drilled from the *Maersk Interceptor* drilling facility from the joint position 58°55′41.704″ north, 02°13′23.042″ east in production licence 001 B. 16/1-21 S will be drilled first in the reservoir to the north, while 16/1-21 A will subsequently be drilled in the reservoir to the southeast.

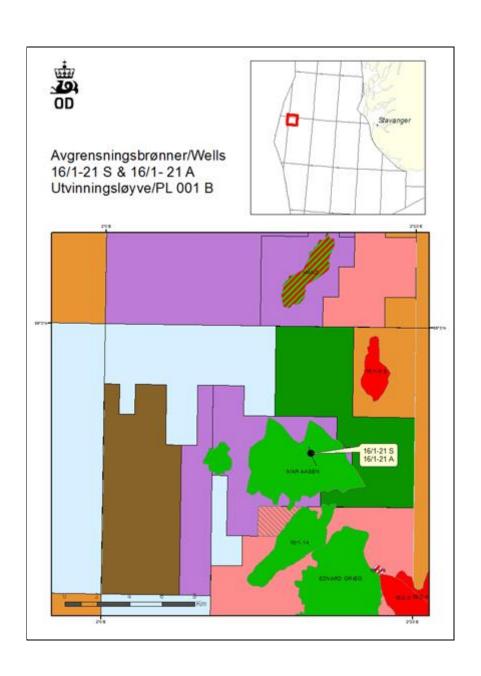
The drilling programme for wells 16/1-21 S and 16/1-21 A relates to appraisal wells on the Ivar Aasen field, where Det norske is the operator with an ownership interest of 34.7862 per cent. The other licensees are Statoil Petroleum AS with 41.4730 per cent, Bayerngas Norge AS with 12.3173 per cent, Wintershall Norge AS with 6.4615 per cent, VNG Norge AS with 3.0230 per cent, Lundin Norway AS with 1.3850 per cent and OMV (Norge) AS with 0.5540 per cent.

The area in this licence consists of part of block 16/1. The wells will be drilled in the eastern part of the Ivar Aasen field in the central part of the North Sea.

On 1 September 1999, production licence 001 B was carved out of production licence 001, which was awarded on 1 September 1965 (Round 1-A). These are the fifth and sixth exploration wells to be drilled within the licence area and the seventh and eighth on the Ivar Aasen field.

The permit is contingent upon the operator securing all other permits and consents required by other authorities prior to commencing drilling activities.

See Factpages for more information about this wellbore.



16/1-21 S and 16/1-21 A

22/04/2015 Det norske oljeselskap AS, operator of production licence 001 B, has completed drilling of appraisal wells 16/1-21 S and 16/1-21 A on the Ivar Aasen field.

The field is located in the central part of the North Sea and was proven in 2008. The size of the field prior to drilling of these two appraisal wells was 24 million standard cubic metres (Sm³) of recoverable oil, 1 million Sm³ of recoverable condensate and 4.5 billion Sm³ of recoverable gas.

The primary target for wells 16/1-21 S and 16/1-21 A was to investigate reservoir rocks and reservoir quality, as well as the extent of an overlying gas cap in the eastern part of the field in Middle Jurassic to upper Triassic reservoir rocks (the Hugin, Sleipner and Skagerrak formations, as well as the Statfjord group). In addition, 16/1-21 S had a secondary exploration target in overlying Paleocene reservoir rocks (the Heimdal formation).

16/1-21 S encountered a total oil column of 54 metres, of which 25 metres were of good to very good reservoir quality in the Skagerrak formation. The oil is undersaturated, which is also the case in the eastern part of the field (16/1-16 and 16/1-16 A). The gas/oil ratio (GOR) in the oil zone is 130-145 Sm³/Sm³. The oil/water contact was not encountered, but was calculated at approx. 2436 metres, which is 2 metres deeper than previously assumed in the Skagerrak formation. Gas was not encountered in the well. In the Heimdal formation, the well encountered 27 metres of aquiferous sandstone of good to very good quality.

16/1-21 A encountered a total oil column of 41 metres and a 4-metre gas column, of which a total of 29 metres was of very good reservoir quality in the Sleipner and Skagerrak formations. The oil in the Sleipner formation is saturated, while the oil in the Skagerrak formation is largely undersaturated. The oil/water contact was not encountered.

The well results have yielded valuable information as regards the final location of production and injection wells. Further work going forward will integrate the new data and contribute to increased field understanding.

The Ivar Aase field field consists of production licences 001 B, 028 B, 242, 338 and 457. The Plan for Development and Operation (PDO) was submitted to the Ministry of Petroleum and Energy on 21 December 2012.

Extensive data acquisition and sampling have been carried out. These are the fourth and fifth appraisal wells in <u>production licence 001 B</u>. This production licence was carved out of production licence 001 on 15 December 1999. PL001 was originally awarded on 1 September 1965 (round 1-A).

Wells 16/1-21 S and 16/1-21 A were drilled to measured depths of 2630 and 3313 metres, respectively, and vertical depths of 2530 and 2463 metres below the sea surface. Both were terminated in the Skagerrak formation in the Upper Triassic. The wells have been permanently plugged and abandoned. Water depth at the site is 113 metres.

The wells were drilled by the *Maersk Interceptor* drilling facility, which will now continue drilling appraisal well 16/1-22 S in the western part of the Ivar Aasen field.

