<u>NPD</u> – exploration drilling result

10/04/2015 The Norwegian Petroleum Directorate granted Det norske oljeselskap AS a drilling permit for well 16/1-22 S, cf. Section 8 of the Resource Management Regulations.

Well 16/1-22 S will be drilled from the *Maersk Interceptor* drilling facility at position 58°54′23.1″ north 02°09′43.2″ east in production licence 001 B, after completing the drilling of appraisal wells 16/1-21 S and 16/1-21 A.

The drilling programme for well 16/1-22 S relates to the drilling of an appraisal well 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 well was drilled in the south-western 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). This is the seventh exploration well to be drilled within the licence area and the ninth on the lvar 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 <u>Factpages</u> for more information about this wellbore.



16/1-22 S, 16/1-22 A og 16/1-22 B

02/07/2015 Det norske oljeselskap AS, operator of the Ivar Aasen field, has completed the drilling of appraisal wells 16/1-22 S, 16/1-22 A and 16/1-22 B.

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 the 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 objective of well 16/1-22 S was to investigate reservoir rocks and reservoir quality, as well as secure depth control along the west flank of the field in Middle Jurassic to Upper Triassic reservoir rocks (the Hugin, Sleipner and Skagerrak formations) in order to optimise well sites with a view to the drainage strategy. Sidetracks 16/1-22 A and 16/1-22 B were drilled 1000 metres northeast and 1350 metres north, respectively, of 16/1-22 S in order to investigate reservoir rocks and perform additional data acquisition. 16/1-22 A also aimed to investigate an underlying seismic anomaly.

16/1-22 S encountered a 3-metre oil column in sandstone of good to very good reservoir quality in the Skagerrak formation. The oil is saturated with a gas/oil ratio of about 160 Sm³/Sm³, as is the case otherwise in the western part of the field (16/1-11, 16/1-11 A and 16/1-9). The oil/water contact was not encountered, but was calculated at about 2435 metres, which is deeper than the previously calculated oil/water contact for the Skagerrak formation (16/1-11 A).

16/1-22 A encountered a total oil column of about 55 metres in the Skagerrak formation, 30 metres of which was in sandstone of varying reservoir quality, from moderate to very good. The oil/water contact was not encountered. The seismic anomaly is linked to the top of a total oil column of about 25 metres in underlying sandstone (alluvial fan), 15 metres of which had moderate reservoir properties. The oily part of the alluvial fan is not included in the field's previously reported reserves.

16/1-22 B encountered a total oil column of about 45 metres in the Skagerrak formation, 25 metres of which was in sandstone of good to very good reservoir quality. The oil/water contact was not encountered.

None of the wells were formation-tested, but comprehensive data collection and sampling was conducted.

The results have yielded valuable information as regards the final location of production and water injection wells. Gas was not encountered in the wells.

The Plan for Development and Operation (PDO) of the <u>lvar Aasen field</u> was submitted to the Ministry of Petroleum and Energy on 21 December 2012.

Wells 16/1-22 S, 16/1-22 A 16/1-22 B were drilled to measured depths of 2640, 2896 and 3215 metres, respectively, and vertical depths of 2562, 2468 and 2501 metres below the sea surface. They were all 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 production drilling on the Ivar Aasen field once the platform's jacket has been installed.

