

## NPD – exploration drilling result

25/10/2013 Wintershall Norge AS, operator of production licence 457, has completed drilling of wildcat wells 16/1-19 S and 16/1-20 A.

Wells 16/1-19 S and 16/1-20 A were drilled about two and a half kilometres east of appraisal wells 16/1-16 and 16/1-16 A at the Ivar Aasen field, and about three kilometres north of the Edvard Grieg field in the central part of the North Sea.

The primary exploration target for wildcat well 16/1-19 S was to prove petroleum in Lower Cretaceous reservoir rocks (the Åsgard formation) in the western part of the Utsira High. The secondary target was to prove petroleum in fractured and/or weathered basement rocks. The well encountered half a metre of tight sandstone/clay stone in the Åsgard formation and fractured basement rocks with oil in the fractures. The reservoir quality is poorer than expected. The well is classified as dry.

The primary exploration target for wildcat well 16/1-20 A was to prove petroleum in Middle Jurassic reservoir rocks (the Hugin formation) to delineate a possible extension of the Ivar Aasen field towards the west side of the Utsira High. The secondary target was to prove petroleum in the Upper Triassic (the Skagerrak formation). The well encountered about 600 metres of sandstone with traces of oil in several intervals in the Åsgard, Draupne, Heather and Hugin formations. The reservoir quality is mostly good, as expected. The well is classified as dry.

Extensive data acquisition and sampling have been carried out. These are the third and fourth exploration wells in [production licence 457](#). The licence was awarded in APA 2007. The 16/1-19 S and 16/1-20 A wells were drilled to a vertical depth of 1953 and 2531 metres below the sea surface, respectively, and with a total depth of 1964 and 3075 metres below the sea surface, respectively. 16/1-19 S was terminated in basement rocks, while 16/1-20 A was terminated in the Skagerrak formation in the Upper Triassic. The wells have been permanently plugged and abandoned. Water depth is 113 metres.

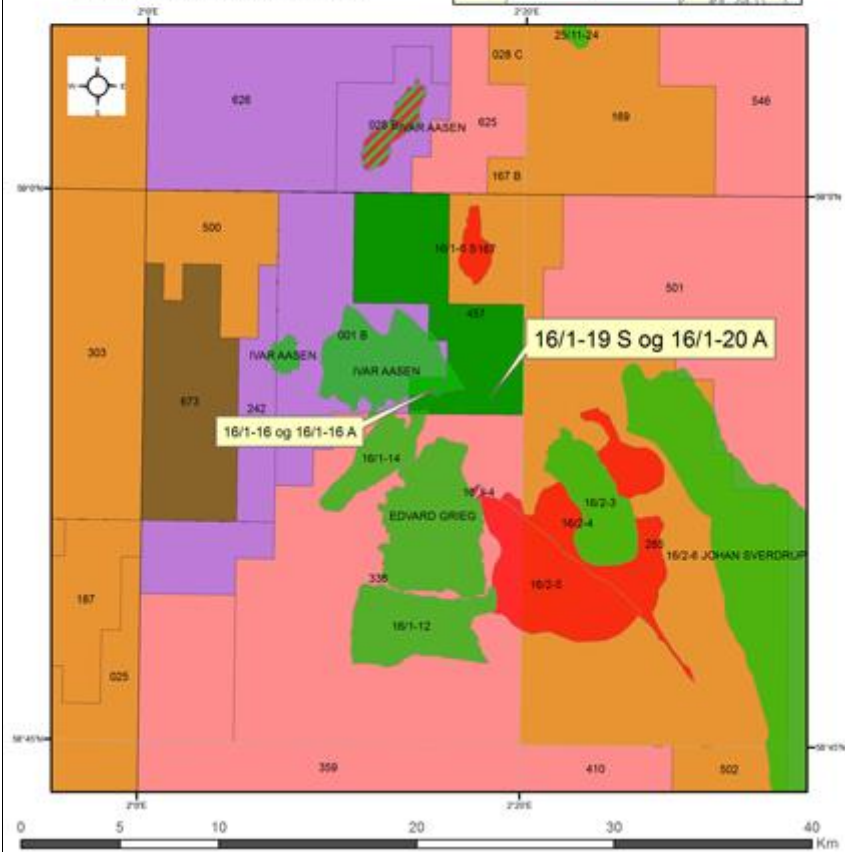
The wells were drilled by the *Borgland Dolphin* drilling facility, which will proceed to the northern North Sea to carry out well repairs on the Vega field, where Statoil is the operator.

See [Factpages](#) for more information about this wellbore.



Brønn/well 16/1-19 S  
Brønn/well 16/1-20 A

Utvinningsløyve/PL 457



# 16/1-19 S og 16/1-20 A

14/08/2013 The Norwegian Petroleum Directorate has granted Wintershall Norge AS a drilling permit for wells 16/1-19 S and 16/1-20 A, cf. Section 8 of the Resource Management Regulations.

Wells 16/1-19 S and 16/1-20 A will be drilled from the *Borgland Dolphin* drilling facility at position 58°54'24.44" north and 02°18'14.05" east for Wintershall Norge AS in production licence 457.

The drilling program for wells 16/1-19 S and 16/1-20 A relates to drilling of a wildcat well and an appraisal, respectively, well in production licence 457. Wintershall is the operator with an ownership interest of 40 per cent. The other licensees are E.ON E&P Norge AS, Bridge Energy Norge AS and VNG Norge AS, all with ownership interests of 20 per cent each.

The area in this licence consists of parts of block 16/1. The well will be drilled about 2.5 km east of appraisal wells 16/1-16 and 16/1-16 A on the oil discovery 16/1-9 Ivar Aasen in the central part of the North Sea.

Production licence 457 was awarded on 29 February 2008 (APA 2007). These are the third and fourth wells to be drilled within the area of the permit.

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

