

NPD – exploration drilling result

06/03/2013 Lundin Norway AS, operator of production licence 501, is about to complete drilling of appraisal well 16/3-5.

The 16/2-6 Johan Sverdrup oil discovery was proven by Lundin during autumn of 2010 in Middle and Upper Jurassic reservoir rocks. The well was drilled about three kilometres east of well 16/2-7 and south of well 16/3-4.

The objective of appraisal well 16/3-5 was to examine the thickness and reservoir properties in the Jurassic and Permian reservoir, oil column, depth of the Jurassic reservoir, and to clarify the oil/water contact in this part of the Johan Sverdrup discovery. The reservoir was encountered somewhat shallower than expected, with a reservoir thickness as expected. The well encountered a 30-metre oil column. The top 14 metres are very good quality Upper Jurassic reservoir rocks, over 16 metres of Permian reservoir rocks (the Zechstein Group) of varying reservoir quality in limestone and dolomite. The total thickness of the Zechstein Group is 25 metres.

Extensive data acquisition and sampling have been carried out in the well. Two formation tests were carried out in Jurassic and Permian reservoir rocks. One test showed a maximum rate of 750 standard cubic metres (Sm³) of oil per flow day through a 48/64-inch nozzle opening from a 14-metre sandstone interval in the Upper Jurassic. The formation test indicates that the Jurassic reservoir has a major lateral scope without flow barriers.

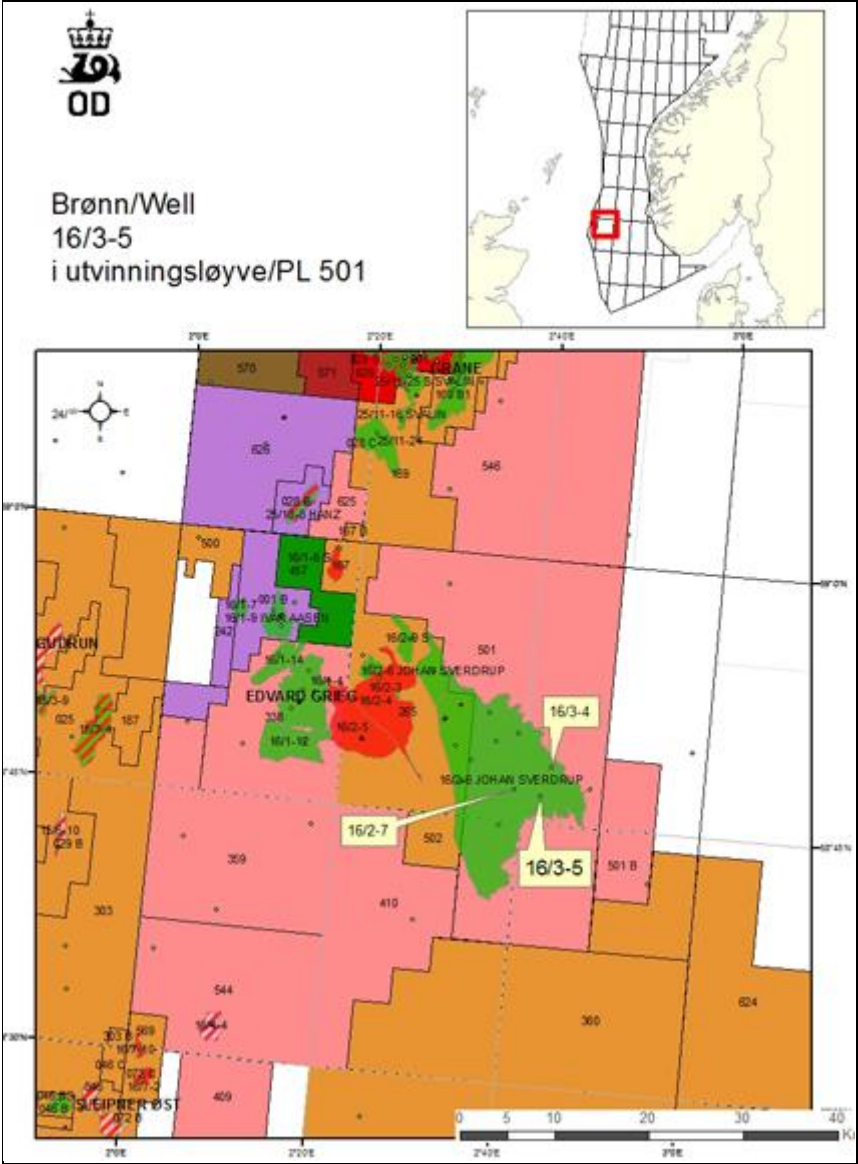
The second formation test was carried out in an 8-metre limestone and dolomite interval in the Zechstein Group, and showed a very low rate without flow to the surface. Loss of drilling mud during drilling at a deeper point in the Zechstein Group shows that the flow properties can vary, as the rocks have zones with large solution pores filled with oil. Special drilling mud was used to close these pores during drilling. Future production of the oil from Permian reservoir rocks can therefore not be ruled out.

This is the twelfth appraisal well in [production licence 501](#). The licence was awarded in APA 2008.

Appraisal well 16/3-5 was drilled to a vertical depth of 2025 metres below the sea surface and terminated in the Rotliegendes Group in the Permian. The well will be permanently plugged and abandoned. Water depth is 115 metres.

The well was drilled by the *Bredford Dolphin* drilling facility, which will now proceed to production licence 359 to drill wildcat well 16/4-6 S where Lundin Norway AS is the operator.

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



16/3-5

22/11/2012 The Norwegian Petroleum Directorate has granted Lundin Norway AS a drilling permit for well 16/3-5, cf. Section 8 of the Resource Management Regulations.

Well 16/3-5 will be drilled from the *Bredford Dolphin* drilling facility in position 58°46'31.59" north 02°42'18.59" east for Lundin Norway AS in drilling permit 501.

The drilling programme for well 16/3-5 concerns the drilling of an appraisal well in production licence 501. Lundin is the operator with an ownership interest of 40 per cent. The other licensees are Statoil Petroleum AS with 40 per cent and Maersk Oil Norway AS with 20 per cent.

The area in this licence consists of parts of blocks 16/2, 3, 5 and 6. The well will be drilled about 2.9 kilometres east of well 16/2-7 and south of well 16/3-4 on **Johan Sverdrup** in the central part of the North Sea.

Production licence 501 was awarded on 23 January 2009 (APA 2008). This is the twelfth well drilled within the area covered by the permit.

The permit is contingent upon the operator having secured all other permits and consents required by other authorities before the drilling starts.

