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

07/12/2010 The Norwegian Petroleum Directorate (NPD) has granted Lundin Norway AS a drilling permit for wellbore 16/1-15, cf. Section 8 of the Resource Management Regulations.

Wellbore 16/1-15 will be drilled from the *Bredford Dolphin* drilling facility at position 58° 52' 24" North 02° 15' 41" East after the rig returns from a stay at the shipyard at Coast Centre Base (CCB Ågotnes) near Bergen.

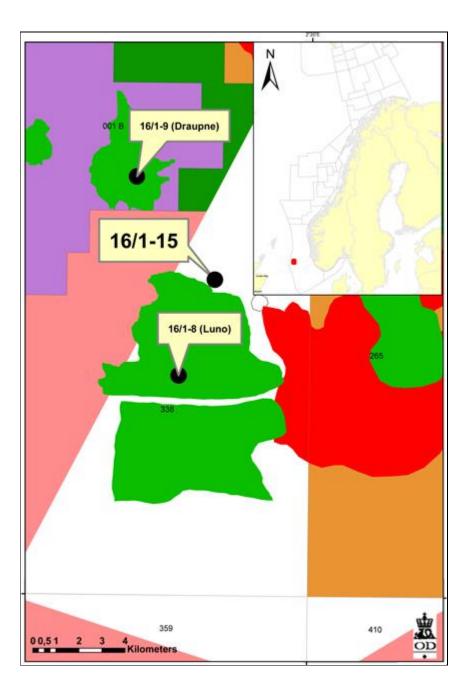
The drilling program for wellbore 16/1-15 applies to the drilling of a wildcat well in production licence 338. Lundin is the operator with a 50 per cent ownership interest. The other licensees are RWE Dea Norge AS (20 per cent) and Wintershall Norge ASA (30 per cent).

The area in this licence consists of the southern half of block 16/1. The well was drilled about five kilometres southeast of 16/1-9 ("Draupne") and about four kilometres northeast of 16/1-8 ("Luno") in the central part of the North Sea.

Production licence 338 was awarded on 17 December 2004 (APA 2004). This is the sixth well to be drilled in the production licence.

The drilling permit is granted on the condition that all other permits and consents required by other authorities have been secured before the drilling activity commences.

See <u>Factpages</u> for more information about this wellbore.



## 16/1-15 and 16/1-15 A

19/05/2011 Lundin Norway AS, operator of production licence 338, has completed drilling of wildcat well 16/1-15 and appraisal well 16/1-15 A.

The wildcat well was drilled approx. two kilometres north of the 16/1-8 (Luno) oil discovery, while the appraisal well was drilled half a kilometre southwest of the wildcat well.

The objective of well 16/1-15 was to prove petroleum in Cretaceous to Triassic reservoir rocks in a separate fault segment north of the 16/1-8 (Luno) oil discovery. The objective of well 16/1-15 A was to delineate the 16/1-15 oil discovery. The wells proved an oil column of 45-50 metres in thin calcareous sandstone in the Lower Cretaceous and in weathered and porous bedrock directly below the sandstone. The oil/water contact is at the same depth as the 16/1-8 discovery. The sandstone in the Lower Cretaceous is three metres thick in 16/1-15 and somewhat thinner in 16/1-15 A. In 16/1-15 the bedrock is cracked and porous, while it has considerably worse reservoir properties in 16/1-15 A.

Extensive data acquisition and sampling has been carried out in both wells. Two successful formation tests have been implemented in 16/1-15. The first test yielded a maximum production rate of 105 standard cubic metres (Sm<sup>3</sup>) of oil per flow day through a 40/64-inch nozzle opening over a 34-metre interval in cracked and porous bedrock. This is the first successful full-scale production test of a reservoir that consists of cracked and porous bedrock on the Norwegian continental shelf. The other test gave a maximum production rate of 620 Sm<sup>3</sup> of oil per flow day through a 40/64-inch nozzle opening in a three-metre zone in Lower Cretaceous sandstone. This test showed good flow properties and very good pressure support.

Preliminary estimates of the size of the discovery are between two and eight million Sm<sup>3</sup> recoverable oil. The oil/gas ratio is 110 Sm<sup>3</sup>/ Sm<sup>3</sup>. The discovery is a northern extension of the 16/1-8 (Luno) oil discovery, and the licensees in <u>production licence 338</u> will include these additional resources in the development plans for 16/1-8.

These are the sixth and seventh exploration wells in production licence 338. The licence was awarded in APA 2004. 16/1-15 and 16/1-15 A were drilled to vertical depths of 2125 and 1986 metres, respectively, below the sea surface, and both

were terminated in bedrock. Both wells have been permanently plugged and abandoned. The water depth is 111 metres.

The wells were drilled by the *Bredford Dolphin* drilling facility, which will now drill wildcat well 16/3-4 in production licence 501, where Lundin Norway AS is the operator.

