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

14/10/2019 The Norwegian Petroleum Directorate has granted MOL Norge AS a drilling permit for well 25/8-19 S, cf. Section 15 of the Resource Management Regulations.

Well 25/8-19 S will be drilled from the *Deepsea Bergen* drilling facility in position 59°20'13.21"N and 2°21'53.28"E.The drilling programme for well 25/9-19 S relates to the drilling of a wildcat well in production licence 820 S. MOL Norge AS is the operator with an ownership interest of 40 per cent. The other licensees are Lundin Norway AS (30 per cent), Wintershall Norge AS (20 per cent) and Pandion Energy AS (10 per cent).

The area in this licence consists of parts of blocks 25/7 and 25/8. The well will be drilled about 6 kilometres northwest of Ringhorne and 210 kilometres northwest of Stavanger.

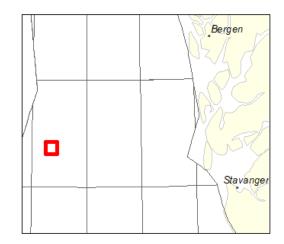
<u>Production licence 820 S</u> was awarded on 5 February 2016 in APA 2015 on the Norwegian shelf.

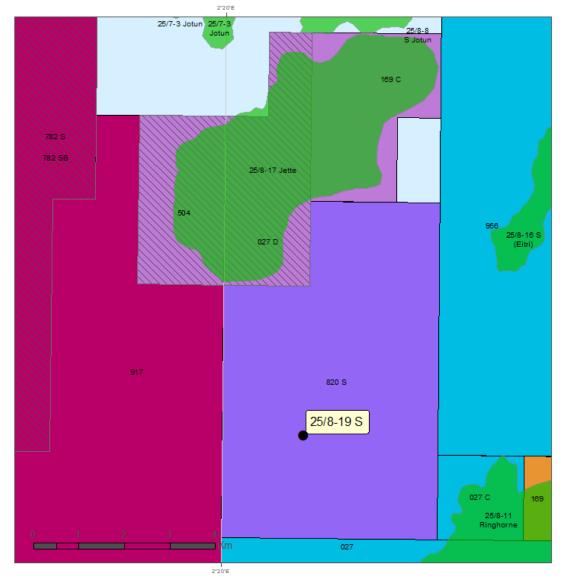
This is the first well to be drilled in the licence. The permit is contingent on the operator securing all other permits and consents required by other authorities prior to commencing the drilling activity.

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



Undersøkingsbrønn/Well 25/8-19 S Utvinningsløyve/PL 820 S





Utskriftsdato: 11.10.2019

Oil and gas discovery near the Balder field in the North Sea - 25/8-19 S and 25/8-19 A

18/03/2020 MOL Norge AS, operator of production licence 820 S, has concluded the drilling of wildcat well 25/8-19 S and appraisal well 25/8-19 A.

The wells were drilled about 8 kilometres northwest of Ringhorne on the Balder field in the central part of the North Sea and about 200 kilometres west of Stavanger.

The primary exploration target for well 25/8-19 S was to prove petroleum in injectite sandstones in the Eocene to Paleocene and in reservoir rocks in the Lower Jurassic (the Nansen Formation in the upper part of the Statfjord Group).

The secondary exploration target was to prove petroleum in sandstones in the Paleocene (the Ty Formation), in reservoir rocks in the Lower Jurassic to Upper Triassic (the Eiriksson Formation and the Skagerrak Formation) and in basement.

In the primary exploration target, no injectite sandstone was encountered in the Eocene or Paleocene. Water-bearing sandstone layers totalling about 45 metres with good to very good reservoir quality were encountered in the Nansen Formation.

In the secondary exploration target, water-filled sandstone layers totalling about 75 metres with extremely good reservoir quality were encountered in the Ty Formation. Oil-bearing sandstones totalling 6 metres with very good to extremely good reservoir quality were encountered in the Eiriksson Formation.

34-metre gas column in sandstone with moderate to good reservoir quality lies over an oil column of minimum 45 metres in sandstones with good to poor reservoir quality in the Skagerrak Formation. These sandstones total 22 metres within the gas and oil column.

The oil/water contact was not encountered. Weathered and partly fractured basement (under a basal conglomerate) is oil-bearing with a column a minimum of 41 metres, but with poor to tight reservoir quality.

The well also encountered thin oil-bearing sandstone layers totalling 7 metres with good to very good reservoir quality in the Heimdal Formation.

The primary exploration target for appraisal well 25/8-19 A was to verify the reservoir potential in the Skagerrak Formation. The secondary exploration target was to perform a flow test in the Skagerrak Formation, verify a petroleum column in the Eiriksson Formation, investigate the upside potential in the Nansen Formation and to confirm reservoir in the Heimdal Formation.

In the primary exploration target, a total of 18 metres of gas and oil-filled sandstone layers with moderate to good reservoir quality were encountered in the Skagerrak Formation. No oil/water contact was proven.

In the secondary exploration target, the Nansen and Eiriksson Formations came in with water-bearing sandstones of about 50 and 30 metres respectively, mainly with good to very good reservoir quality.

A thin, oil-bearing sandstone of 2 metres with good reservoir quality was encountered in the Heimdal Formation, and which delineated the oil discovery in the Paleocene.

The well also encountered thin gas and oil-bearing sandstone layers (injectites) totalling 8 metres with very good reservoir quality in the Eocene. The appraisal well also confirmed oil-bearing basement, but with pool reservoir quality. No oil/water contact was proven in basement.

Extensive data acquisition and sampling have been carried out in the wells. Mini-DST (pressure and fluid samples) have been carried out in injectites in the Eocene, in the Heimdal Formation, the Eiriksson Formation, the Skagerrak Formation and in basement.

A formation test has been performed in the Skagerrak Formation in the appraisal well. The test yielded maximum respective oil and gas production rates of 475 and 75,600 standard cubic metres (Sm³) per flow day through a 32/64-inch nozzle opening.

The formation test revealed moderate flow properties. Water was not produced during the test. Measured average GOR and oil density are 180 m³/m³ and 40 API respectively.

Preliminary estimates place the size of the oil and gas discovery in the Skagerrak Formation between 2 and 11 million standard cubic metres (Sm³) of recoverable oil equivalents.

So far, no recoverable volume has been calculated for oil and gas proven in the other levels. The licensees will now evaluate the well results with regard to financial commerciality, further delineation and other prospectivity in the licence.

These are the first and second exploration wells in production licence 820 S. The licence was awarded in APA 2015.

Wells 25/8-19 S and 25/8-19 A were drilled to respective measured/vertical depths of 2737/2522 metres and 2927/2613 metres below sea level, and were terminated in basement rock.

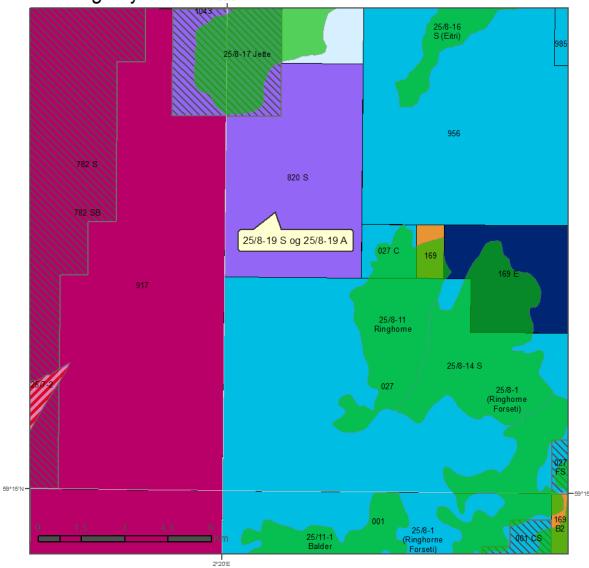
Water depth at the site is 126 metres. The wells have been permanently plugged and abandoned.

Wells 25/8-19 S and 25/8-19 A were drilled by the Deepsea Bergen drilling facility, which will now proceed to the shipyard at Ågotnes west of Bergen for periodic classification.



Bergen Bergen Stavanger

Undersøkingsbrønn/Well 25/8-19 S Avgrensingsbrønn/Well 25/8-19 A Utvinningsløyve/PL 820 S



Utskriftsdato: 17.03.2020