

General information

Wellbore name	25/8-19 A
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	25/8-19
Seismic location	PGS16M01-PGS15917VIK (IL 36471. XL 132652)
Production licence	820 S
Drilling operator	MOL Norge AS
Drill permit	1805-L
Drilling facility	DEEPSEA BERGEN
Drilling days	80
Entered date	31.12.2019
Completed date	19.03.2020
Plugged and abondon date	19.03.2020
Release date	19.03.2022
Publication date	08.08.2022
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL/GAS
Discovery wellbore	NO
1st level with HC, age	LATE TRIASSIC
1st level with HC, formation	SKAGERRAK FM
2nd level with HC, age	PALEOCENE
2nd level with HC, formation	HEIMDAL FM
Kelly bushing elevation [m]	23.0
Water depth [m]	126.0
Total depth (MD) [m RKB]	2950.0
Final vertical depth (TVD) [m RKB]	2636.0
Oldest penetrated formation	BASEMENT
Geodetic datum	ED50
NS degrees	59° 20' 13.21" N
EW degrees	2° 21' 53.27" E
NS UTM [m]	6577903.13
EW UTM [m]	463861.92
UTM zone	31
NPDID wellbore	8981

Wellbore history

General

Well 25/8-19 A was drilled as an appraisal well on the 25/8-19 S Evra discovery on the southern part of the Heimdal Terrace in the North Sea. Well 25/8-19 S found oil and gas in several intervals from Paleocene to Basement. The primary objective was to investigate the hydrocarbon bearing intervals encountered in well 25/8-19 S, find the oil-water contact and to perform a well test in the Skagerrak Formation.

Operations and results

Appraisal well 25/8-19 A was kicked off from 1017 m in well 25/8-19 S on 31 December 2019. It was drilled with the semi-submersible installation Deepsea Bergen to 2950 m (2636.9 m TVD) in Basement rock. Hole problems led to plug back and drilling of a side-track for the planned well test. The side-track 25/8-19 A T2 was kicked off at 1960 m on 2 February 2020 and drilled to final TD at 2975 m (2567.8 m TVD) in Basement rock. The well was drilled with RheGuard oil-based mud from kick-off to TD.

The well encountered thin gas and oil-bearing sandstone injectite layers totalling 8 metres from 1760 to 1810 m in the lowermost Hordaland Group and in the Balder Formation at 1818 m. Thin, oil-bearing sandstones were encountered also throughout the Heimdal Formation. The Upper and Middle-Lower Statfjord units came in with water-bearing sandstones of about 50 and 30 metres, respectively. A total of 18 metres of gas and oil-filled sandstone layers were encountered in the Skagerrak Formation between 2615 and 2806 m. No oil/water contact was proven in the Skagerrak Formation. The well confirmed oil-bearing basement. No oil/water contact was proven in basement.

In addition to the hydrocarbon-bearing intervals, oil shows with direct and cut fluorescence were observed in the lower Ty Formation as well as in the lower - middle Statfjord Group.

Four cores were cut in the 25/8-19 A wellbore. Core 1 was cut from 2001 to 2029 m in the Heimdal Formation with 100% recovery. Core 2 was cut from 2373 to 2390 m in the lower Statfjord Group with 99.24% recovery. Cores 3 and 4 were cut in succession from 2798 to 2823.1 m in the Skagerrak Formation and Basement with 100 % and 94.63% recoveries, respectively. In wellbore 25/8-19 A MDT fluid samples were taken in the Eocene at 1770 m (gas) and 1801.51 m (oil). In the side-track wellbore 25/8-19 A T2 an MDT sample was taken at 2654 m in the Skagerrak Formation (oil).

Metrol pressure and temperature gauges were installed at 2625 mm with repeaters at 1454 m and 625 m, as part of the plugging. The well was permanently abandoned on 19 March 2020 as an oil and gas appraisal well.

Testing

One DST was performed in the interval 2651 to 2697 m in the Skagerrak Formation. The test was performed in the 25/8-19 A T2 wellbore. The test produced in the high flow period 475 Sm³ oil/day with an average GOR of 175 Sm³/Sm³ through a 32/64-inch choke. Based on downhole measurements during the test the temperature at mid perforations was 95.6 °C.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1020.00	2974.00

Cuttings available for sampling?	YES
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Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2001.0	2029.0	[m]
2	2373.0	2389.5	[m]
3	2798.0	2812.5	[m]
4	2812.5	2822.5	[m]

Total core sample length [m]	69.0
Cores available for sampling?	YES

Oil samples at the Norwegian Offshore Directorate

Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
DST		0.00	0.00			YES
DST		0.00	0.00	OIL	05.03.2020 - 15:15	YES
MDT		1801.51	0.00	OIL	06.01.2020 - 00:00	YES
MDT		2654.00	0.00	OIL	09.02.2020 - 00:00	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
149	NORDLAND GP
149	UNDIFFERENTIATED
488	UTSIRA FM
679	HORDALAND GP
679	SKADE FM
998	UNDIFFERENTIATED

1123	GRID FM
1153	UNDIFFERENTIATED
1810	ROGALAND GP
1810	BALDER FM
1897	SELE FM
1957	LISTA FM
1986	HEIMDAL FM
2019	LISTA FM
2051	VÅLE FM
2071	TY FM
2187	DUNLIN GP
2187	AMUNDSEN FM
2211	STATFJORD GP
2211	NANSEN FM
2286	EIRIKSSON FM
2483	HEGRE GP
2483	SKAGERRAK FM
2806	BASEMENT

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AIT TLD HNGS	1810	2446
GR CMR MDT	1711	1912
LWD - DIR PWD GR DEN NEU RES SON	1017	1923
LWD - RES GR DIR PWD DEN NEU	1923	2949
NGI MAST 2PPC	1010	2446
NGI MAST 3PPC ROBN	0	2446
ROBN PPC MDT NEXT NGI GR	1915	2408
XL ROCK GR	1705	1915

Casing and leak-off tests

Casing type	Casing diam. [inch]	Casing depth [m]	Hole diam. [inch]	Hole depth [m]	LOT/FIT mud eqv. [g/cm3]	Formation test type
SURF.COND.	13 3/8	1009.5	17 1/2	1009.5	1.74	FIT
INTERM.	9 5/8	1883.0	12 1/4	1883.0	1.61	LOT
OPEN HOLE		2637.0	8 1/2	2637.0	0.00	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
1892.30	[m]
1888.50	[m]
1886.20	[m]
1884.00	[m]
1862.00	[m]
1845.40	[m]
1843.50	[m]
1834.00	[m]
1819.00	[m]
1815.40	[m]
1804.70	[m]
1803.50	[m]
1801.50	[m]
1787.50	[m]
1776.20	[m]
1770.00	[m]
1762.50	[m]
1752.50	[m]
1757.50	[m]
1739.20	[m]
1705.00	[m]
2822.44	[m]
2820.60	[m]
2820.08	[m]
2819.30	[m]
2818.60	[m]
2817.41	[m]
2816.23	[m]
2815.49	[m]
2814.24	[m]
2814.04	[m]
2813.27	[m]
2812.68	[m]
2812.08	[m]
2811.75	[m]
2810.57	[m]

2809.86	[m]
2808.42	[m]
2807.25	[m]
2806.95	[m]
2806.25	[m]
2805.50	[m]
2805.02	[m]
2804.75	[m]
2804.25	[m]
2804.02	[m]
2802.50	[m]
2802.02	[m]
2801.75	[m]
2801.30	[m]
2800.86	[m]
2799.24	[m]
2799.02	[m]
2798.35	[m]
2383.63	[m]
2382.73	[m]
2302.50	[m]
2382.05	[m]
2831.35	[m]
2380.50	[m]
2380.11	[m]
2379.34	[m]
2376.80	[m]
2376.26	[m]
2375.80	[m]
2375.15	[m]
2374.22	[m]
2373.78	[m]
2373.03	[m]
2028.40	[m]
2023.61	[m]
2022.14	[m]
2021.87	[m]
2021.45	[m]
2020.62	[m]
2018.08	[m]

2017.18	[m]
2013.50	[m]
2012.20	[m]
2010.75	[m]
2010.53	[m]
2009.82	[m]
2008.22	[m]
2007.90	[m]
2006.28	[m]
2005.70	[m]
2004.03	[m]
2003.28	[m]
2001.42	[m]