

**General information**

Wellbore name	31/7-2 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
Discovery	31/7-1 (Brasse)
Well name	31/7-2
Seismic location	Inline 2414. Xline 2615 (LN11M03)
Production licence	740
Drilling operator	Faroe Petroleum Norge AS
Drill permit	1662-L
Drilling facility	DEEPSEA BERGEN
Drilling days	20
Entered date	08.07.2017
Completed date	27.07.2017
Plugged date	27.07.2017
Plugged and abandon date	27.07.2017
Release date	27.07.2019
Publication date	27.07.2019
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL/GAS
Discovery wellbore	NO
1st level with HC, age	LATE JURASSIC
1st level with HC, formation	SOGNEFJORD FM
Kelly bushing elevation [m]	23.0
Water depth [m]	120.0
Total depth (MD) [m RKB]	2723.0
Final vertical depth (TVD) [m RKB]	2299.0
Maximum inclination [°]	53.09
Oldest penetrated age	LATE JURASSIC
Oldest penetrated formation	SOGNEFJORD FM
Geodetic datum	ED50
NS degrees	60° 24' 18.14" N
EW degrees	3° 2' 23.75" E
NS UTM [m]	6696678.96



EW UTM [m]	502200.06
UTM zone	31
NPDID wellbore	8213

Wellbore history

General

Well 31/7-2 A was drilled as a geological side-track to well bore 31/7-2 S to appraise the Brasse discovery on the Bjørgvin Arch in the North Sea. The primary objective was to identify lateral development of the Sognefjord Formation updip to the east of the primary well bore, and thereby confirm hydrocarbon presence, pressure gradients, and fluid contacts.

Operations and results

Appraisal well 31/7-2 A was kicked off from 31/7-2 S, below the 13 3/8" surface casing at 919 m on 8 July 2017 and drilled to TD at 2723 in the lower part of the Sognefjord Formation. Operations proceeded without significant problems. The well was drilled with Enviromul oil-based mud from kick-off to TD.

A gas column of approximately 6 m and an oil column of approximately 18 m were encountered in the Sognefjord Formation. It showed good reservoir properties, in line with the 31/7-2 S well. The properties of the oil and gas are the same as in the previous Brasse wells. The gas-oil contact was encountered at 2583 m (2177 m TVD) which is approximately 6m deeper than the gas-oil contact recorded in wells 31/7-1 and 31/7-1 A. The oil-water contact was encountered at approximately 2604 m (2195 m TVD), which is in accordance with the other wells. Pressure measurements showed communication with the primary well bore and wells 31/7-1 and 31/7-1 A. Weak oil shows (patchy direct fluorescence and slow blue-white blooming cut) were described below the OWC down to 2628 m.

Two cores were cut in the interval 2574 to 2655 m with 100% recovery. This covers the lower 4 meters of the Draupne Formation and 76 m into the Sognefjord Formation. Fluid samples were taken at 2580.7 m (gas), 2588.01 m (oil), 2597.33 m (oil), 2604.53 m (water), 2610.1 m (water), and 2616 m (water).

The well was permanently abandoned on 27 July 2017 as an oil and gas appraisal.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
930.00	2723.00

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	2574.0	2627.8	[m]
2	2628.0	2655.8	[m]

Total core sample length [m]	81.6
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
143	NORDLAND GP
680	UTSIRA FM
822	HORDALAND GP
2147	ROGALAND GP
2147	BALDER FM
2257	SELE FM
2357	LISTA FM
2481	VÅLE FM
2488	SHETLAND GP
2488	HARDRÅDE FM
2568	VIKING GP
2568	DRAUPNE FM
2579	SOGNEFJORD FM
2692	FENSEFJORD FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - DI APWD GR RES SON	919	2496
LWD - GR RES SON DEN NEU	2496	2723
MDT GR	2505	2648
QGEO MSIP	2494	2723
USIT CBL GR	2039	2494
VSP GR	900	2713
ZAIT ADT PEX CMR GR ECRD	2494	2723



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
LINER	9 5/8	2494.0	12 1/4	2496.0	1.76	FIT
		2723.0	8 1/2	2723.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1866	1.50	36.0		ENVIROMUL OBM	
2496	1.24	20.0		ENVIROMUL OBM	
2496	1.51	34.0		ENVIROMUL OBM	
2574	1.24	16.0		ENVIROMUL OBM	
2628	1.25	18.0		ENVIROMUL OBM	
2655	1.24	18.0		ENVIROMUL OBM	
2724	1.24	18.0		ENVIROMUL OBM	