Generell informasjon

Brønnbane navn	31/7-2 A
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	31/7-1 (Brasse)
Brønn navn	31/7-2
Seismisk lokalisering	Inline 2414. Xline 2615 (LN11M03)
Utvinningstillatelse	740
Boreoperatør	Faroe Petroleum Norge AS
Boretillatelse	1662-L
Boreinnretning	DEEPSEA BERGEN
Boredager	20
Borestart	08.07.2017
Boreslutt	27.07.2017
Plugget dato	27.07.2017
Plugget og forlatt dato	27.07.2017
Frigitt dato	27.07.2019
Publiseringsdato	27.07.2019
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	SOGNEFJORD FM
Avstand, boredekk - midlere havflate [m]	23.0
Vanndybde ved midlere havflate [m]	120.0
Totalt målt dybde (MD) [m RKB]	2723.0
Totalt vertikalt dybde (TVD) [m RKB]	2299.0
Maks inklinasjon [°]	53.09
Eldste penetrerte alder	LATE JURASSIC
Eldste penetrerte formasjon	SOGNEFJORD FM
Geodetisk datum	ED50
NS grader	60° 24' 18.14'' N

ØV grader	3° 2' 23.75'' E
NS UTM [m]	6696678.96
ØV UTM [m]	502200.06
UTM sone	31
NPDID for brønnbanen	8213

Brønnhistorie

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.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
930.00	2723.00

Borekaks tilgjengelig for prøvetaking?	YES

Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2574.0	2627.8	[m]
2	2628.0	2655.8	[m]

Total kjerneprøve lengde [m]	81.6
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
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	FENSFJORD FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [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

Foringsrør og formasjonsstyrketester

Type utforing	Utforing diam. [tommer]	Utforing dybde [m]	Brønnbane diam. [tommer]	Brønnbane dyp [m]	LOT/FIT slam eqv. [g/cm3]	Type formasjonstest
LINER	9 5/8	2494.0	12 1/4	2496.0	1.76	FIT
		2723.0	8 1/2	2723.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
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	