



Generell informasjon

Brønnbane navn	31/7-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	31/7-1 (Brasse)
Brønn navn	31/7-1
Seismisk lokalisering	Inline 2414. Xline 2615 (LN11M03)
Utvinningstillatelse	740
Boreoperatør	Faroe Petroleum Norge AS
Boretillatelse	1620-L
Boreinnretning	TRANSOCEAN ARCTIC
Boredager	31
Borestart	23.05.2016
Boreslutt	22.06.2016
Frigitt dato	22.06.2018
Publiseringsdato	22.06.2018
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	SOGNEFJORD FM
Avstand, boredekk - midlere havflate [m]	24.0
Vanndybde ved midlere havflate [m]	118.6
Totalt målt dybde (MD) [m RKB]	2780.0
Totalt vertikalt dybde (TVD) [m RKB]	2780.0
Maks inklinasjon [°]	1.3
Temperatur ved bunn av brønnbanen [°C]	109
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	JOHANSEN FM
Geodetisk datum	ED50
NS grader	60° 25' 31.55" N



ØV grader	3° 1' 28.23" E
NS UTM [m]	6698949.76
ØV UTM [m]	501349.50
UTM sone	31
NPDID for brønnbanen	7954

Brønnhistorie

General

Well 31/7-1 was drilled to test the Brasse prospect on the northern part of the Bjørgvin Arch between the Brage and Oseberg Sør fields in the North Sea. The primary exploration target for the wells was to prove and delineate petroleum in Middle Jurassic reservoir rocks (the Fensfjord Formation). The secondary exploration target was also in Middle Jurassic reservoir rocks (the Brent Group) and the third exploration target was in the Lower Jurassic (the Cook Formation and the Statfjord Group).

Operations and results

Wildcat well 31/7-1 was spudded with the semi-submersible installation Transocean Arctic on 23 May 2016 and drilled to TD at 2780 m in the Early Jurassic Johansen Formation. No significant problem was encountered in the operations. The well was drilled with seawater and hi-vis pills down to 908 m and with KCl/polymer/GEM mud from 908 m to TD.

The well encountered the Sognefjord Formation at 2154 m, just below the Draupne shales and overlaying the Fensfjord Formation. The Sognefjord sandstones/siltstones were found to be gas and oil bearing. Hydrocarbons columns of 18 m gas and 24.4 m oil were identified. MDT pressure data proved a GOC at 2172 m and an OWC at 2196.4 m. The Sognefjord Formation has 76 m gross reservoir, 28.76 m net reservoir, of which 21.13 m is net pay. Top Fensfjord was encountered at 2230 m. The Fensfjord Formation is mainly siltstones, and it is water bearing. Top Brent Group was encountered 6 m higher than prognosis, and all reservoirs were water bearing. The Cook Formation and the Statfjord Group were also water bearing. Oil shows were described in the hydrocarbon bearing part of the Sognefjord Formation, with weak shows below the OWC down to 2219 m. These were the only oil shows described in the well.

Two cores were cut in succession from 2165 to 2249 m with 100% recovery. MDT fluid samples were taken at 2158.3 m (gas), 2170.95 m (gas), 2182.2 m (oil), and at 2200.98 m (water).

The well bore was plugged back for sidetracking and abandoned on 22 June 2016 as an oil and gas discovery.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
920.00	2780.00



Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2165.0	2194.6	[m]
2	2194.6	2248.6	[m]

Total kjerneprøve lengde [m]	83.6
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
143	NORDLAND GP
679	UTSIRA FM
837	HORDALAND GP
837	NO FORMAL NAME
1835	ROGALAND GP
1835	BALDER FM
1905	SELE FM
1950	LISTA FM
2080	VÅLE FM
2085	SHETLAND GP
2085	HARDRÅDE FM
2143	VIKING GP
2143	DRAUPNE FM
2154	SOGNEFJORD FM
2230	FENSFJORD FM
2373	BRENT GP
2373	TARBERT FM
2390	NESS FM
2415	ETIVE FM
2425	OSEBERG FM
2449	DUNLIN GP
2449	DRAKE FM
2598	COOK FM



2618	AMUNDSEN FM
2756	JOHANSEN FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
LWD - DIR	143	209
LWD - GR ECD RES DIR	209	908
LWD - GR ECD RES DIR DEN NEU SON	2115	2780
LWD - GR ECD RES DIR SON	209	2115
MDT GR	2155	2231
MSCT GR	2145	2775
MSIP GR	2040	2770
PEX HRLA CMR	2070	2510
USIT CBL GR	1692	2106
VSP GR	2090	2770

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
CONDUCTOR	30	209.0	36	209.0	0.00	
SURF.COND.	13 3/8	902.0	17 1/2	908.0	1.70	FIT
PILOT HOLE		908.0	9 7/8	908.0	0.00	
INTERM.	9 5/8	2107.0	12 1/4	2115.0	1.67	LOT
OPEN HOLE		2780.0	8 1/2	2780.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
854	1.40	16.0		KCL/Polymer/GEM	
1009	1.40	16.0		KCL/Polymer/GEM	
2000	1.40	16.0		KCL/Polymer/GEM	
2000	1.25	16.0		KCL/Polymer/GEM	
2280	1.24	15.0		KCL/POLYMER/GEM	
2481	1.25	16.0		KCI/Polymer/Glycol	
2674	1.24	18.0		KCL/POLYMER/GEM	



2780	1.25	17.0		KCl/Polymer/Glycol	
2780	1.24	18.0		KCl/Polymer/Glycol	