



Generell informasjon

Brønnbane navn	31/2-22 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	FRAM
Funn	31/2-22 S (Blasto)
Brønn navn	31/2-22
Seismisk lokalisering	3D survey CGG18M01 Inline: 7759 Xline: 26419
Utvinningstillatelse	090 I
Boreoperatør	Equinor Energy AS
Boretillatelse	1838-L
Boreinnretning	WEST HERCULES
Boredager	32
Borestart	09.12.2020
Boreslutt	03.03.2021
Plugget dato	03.03.2021
Frigitt dato	03.03.2023
Publiseringsdato	03.03.2023
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	SOGNEFJORD FM
Avstand, boredekk - midlere havflate [m]	31.0
Vanndybde ved midlere havflate [m]	349.0
Totalt målt dybde (MD) [m RKB]	2380.0
Totalt vertikalt dybde (TVD) [m RKB]	2313.0
Maks inklinasjon [°]	22.2
Temperatur ved bunn av brønnbanen [°C]	90
Eldste penetrerte alder	MIDDLE JURASSIC



Eldste penetrerte formasjon	HEATHER FM
Geodetisk datum	ED50
NS grader	60° 58' 47.97" N
ØV grader	3° 30' 16.84" E
NS UTM [m]	6760824.16
ØV UTM [m]	527314.27
UTM sone	31
NPDID for brønnbanen	9185

Brønnhistorie

General

Well 31/2-22 was drilled to test the Blasto prospect located on the Lomre Terrace close to the Fram and Troll Fields in the North Sea. Blasto is in a rotated fault block setting up-dip of the dry 31/2-8 well located in the same structure. The primary objective is the Late Jurassic shallow marine Sognefjord Formation. Secondary objective was to evaluate the Fensfjord Formation.

Operations and results

Wildcat well 31/2-22 S was drilled with the semi-submersible installation West Hercules. A pilot hole was drilled from seabed to 477 m. No shallow gas was observed. The main well was initiated on 13 November 2020 by opening to 26" hole, which was drilled to 730 m. Minor shallow water flow was observed but the flow died out. The 20" casing was set and cemented. Well 31/1-2 S (Røver Nord) was then drilled, before drilling the rest of the 31/2-22 S to TD at 2379 m (2313 m TVD) m in the Middle Jurassic, Heather Formation. Technical problems with the BOP caused close to 4 days down time, otherwise operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 730 m and with Glydril mud from 730 m to TD.

Fractured carbonate in the Hardråde Formation proved to be gas bearing. The formation is difficult to evaluate hence the result are uncertain. Top Upper Sognefjord Formation was encountered at 1907 m (1859 m TVD) and proved to be oil bearing with a water leg. A second oil column was found in the Lower Sognefjord Formation also with a water leg. The reservoirs are pressure depleted ca 25 bars compared to virgin pressure due to production on the Troll Field. The Fensfjord Formation was water bearing. No shows were described above top Sognefjord. Oil shows (cut and direct fluorescence) were described down to the base of the cores at 2083 m.

bearing.

Three cores were cut in succession from 1927 to 2083 m in the Sognefjord and Heather formations with 98.5 to 100 % recovery. MDT fluid samples were taken in the Hardråde Formation at 1883.4 m (gas) and 1848.5 m (gas), and in the Sognefjord Formation at 1918.3 m (oil), 1942 m (water), 1999 m (oil) and 2048.8 m (water).

The well was plugged back for side-tracking on 3 March 2021 as an oil discovery.

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
740.00	2379.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1927.0	1963.5	[m]
2	1963.5	2026.3	[m]
3	2026.8	2082.2	[m]

Total kjerneprøve lengde [m]	154.7
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
380	NORDLAND GP
380	NO FORMAL NAME
777	HORDALAND GP
777	UNDIFFERENTIATED
1215	NO FORMAL NAME
1421	ROGALAND GP
1421	BALDER FM
1471	SELE FM
1542	LISTA FM
1775	VÅLE FM
1848	SHETLAND GP
1848	HARDRÅDE FM
1881	VIKING GP
1881	DRAUPNE FM
1907	SOGNEFJORD FM
1980	HEATHER FM
1995	SOGNEFJORD FM



2061	HEATHER FM
2231	FENSFJORD FM
2328	HEATHER FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
FMI MSIP	1366	2377
HRLA PEX HNGS	1827	2380
MDT	1869	1999
MDT DP	1848	1883
MWD - GR RES DEN NEU DIR	1366	1773
MWD - GR RES DIR	401	1366
MWD - GR RES DIR	1773	2379
XLR	1847	1923
XPT CMR NEXT	1848	2372
ZOVSP	560	2380

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	401.2	30	401.2	0.00	
INTERM.	20	720.6	26	730.0	1.42	FIT
INTERM.	13 3/8	1360.0	17 1/2	1366.0	1.52	LOT
INTERM.	9 5/8	1839.0	12 1/4	1840.0	1.44	LOT
OPEN HOLE		2379.0	8 1/2	2379.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
477	1.30	17.0	11.0	KCl/Polymer	
730	1.30	17.0	11.0	Glydril	
811	1.30	11.0	10.0	Glydril	
995	1.31	16.0	12.0	Glydril	
1366	1.33	12.0	9.0	Glydril	
1850	1.20	10.0	10.0	Glydril	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 17.5.2024 - 04:08

2379	1.20	11.0	14.0	Glydril	
2379	1.31	15.0	13.5	Glydril	