



Generell informasjon





Brønnbane navn	31/11-1 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	31/11-1
Seismisk lokalisering	CGG18M01 in-line 8009. x-line 18593
Utvinningstillatelse	785 S
Boreoperatør	Equinor Energy AS
Boretillatelse	1845-L
Boreinnretning	DEEPSEA ATLANTIC
Boredager	26
Borestart	20.04.2021
Boreslutt	28.06.2021
Plugget og forlatt dato	28.06.2021
Frigitt dato	07.01.2022
Publiseringsdato	07.01.2022
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	30.0
Vanndybde ved midlere havflate [m]	289.0
Totalt målt dybde (MD) [m RKB]	3284.0
Totalt vertikalt dybde (TVD) [m RKB]	3165.0
Maks inklinasjon [°]	24
Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	HEGRE GP
Geodetisk datum	ED50
NS grader	60° 6' 4.87" N
ØV grader	3° 34' 31.79" E
NS UTM [m]	6662994.04
ØV UTM [m]	532003.00
UTM sone	31
NPDID for brønnbanen	9241



Brønnhistorie

General

Well 31/11-1 S was drilled to test the Stovegolvet prospect in the central part of the Stord Basin in the North Sea in North Sea. The primary objective was to test the hydrocarbon potential in the Early Jurassic Johansen Formation. The secondary objective was to test the Sognefjord, Fensfjord and Krossfjord formation in the Late Jurassic Viking Group.

Operations and results

A 9 7/8" pilot hole was drilled to 820m MD to check for shallow gas. No shallow gas or shallow water flow was

observed. Wildcat well 31/11-1 S was spudded with the semi-submersible installation Deepsea Atlantic on 20 April 2021 and drilled to TD at 3284 m (3165 m TVD) m in the Late Triassic Lunde Formation. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 820 m, with Carbosea oil-based mud from 820 m to 2273 m, and with water-based Perflow CM mud from 2273 m to TD.

The Viking group was encountered at 2191 m (2158 m TVD) with a 112 m TVD thick high gamma ray Draupne Formation on top. Below was the Heather formation with intercalated Sognefjord, Fensfjord and Krossfjord sands with moderate to good reservoir properties. A 63 m TVD thick Brent Group, Rannoch Formation, was penetrated between the Viking Group and top Dunlin Group with top at 2827 m (2744 m TVD). A 63 m TVD thick Johansen Formation with moderate reservoir properties was encountered at 2929 m (2839 m TVD). No high gas readings observed in any of the sections. Gas readings were far below 1% in all sections. The highest gas readings recorded was 0.54% in the Heather Formation. No oil shows were seen.

No cores were cut. No fluid sample was taken. The 9 5/8" casing was set in the middle of the Draupne Formation, at 2227.1 m. Cuttings samples from the Draupne Formation below this depth was characterised as "bad". A limited number of pressure points taken while drilling and on wireline showed water gradients in all measured formations. Horner corrected wireline temperatures gave a formation temperature of 107 °C at 2653 m.

The well was permanently abandoned on 28 June as a dry well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
830.00	3284.00

Borekaks tilgjengelig for prøvetaking?	YES
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Litostratigrafi



Topp Dyb [mMD RKB]	Litostrat. enhet
319	NORDLAND GP
319	NAUST FM
692	HORDALAND GP
692	UNDIFFERENTIATED
1434	ROGALAND GP
1434	BALDER FM
1456	SELE FM
1476	LISTA FM
1565	SHETLAND GP
1565	KYRRE FM
1595	TRYGGVASON FM
1614	BLODØKS FM
1628	SVARTE FM
1673	CROMER KNOLL GP
1673	RØDBY FM
1895	SOLA FM
1942	ÅSGARD FM
2191	VIKING GP
2191	DRAUPNE FM
2313	HEATHER FM
2317	SOGNEFJORD FM
2412	HEATHER FM
2615	FENSFJORD FM
2678	KROSSFJORD FM
2721	HEATHER FM
2758	BRENT GP
2758	RANNOCH FM
2827	DUNLIN GP
2827	DRAKE FM
2898	COOK FM
2906	BURTON FM
2929	JOHANSEN FM
2998	AMUNDSEN FM
3008	STATFJORD GP
3008	NANSEN FM
3043	EIRIKSSON FM
3120	HEGRE GP
3120	LUNDE FM



Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
DSL CN ZDL XMAC RTEX STAR	1970	2718
DSL FTEX	2318	2706
GR DEN MREX	2300	2700
GR MAX COR	2299	2731
MWD - OT	339	822
MWD - OT GR RES	2273	2790
MWD - OT ST	822	2273
MWD - ZT AT	2791	3284
MWD - ZT AT ORD CCN TT MT	2790	3200

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	339.6	30	340.0	0.00	
INTERM.	20	815.0	26	820.0	1.48	FIT
INTERM.	9 5/8	2265.0	12 1/4	2273.0	1.74	LOT
LINER	7	2790.0	8 1/2	2791.0	1.62	LOT
OPEN HOLE		3284.0	6	3284.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
571	1.25	26.0	6.5	CARBOSEA	
2277	1.21	13.0	11.5	Perfflow CM	
2299	1.22	14.0	12.5	Perfflow CM	
3284	1.23	14.0	12.5	Perfflow CM	
3284	1.25	15.0	11.5	Perfflow CM	