



Generell informasjon

Brønnbane navn	24/9-12 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	BØYLA
Funn	24/9-12 S (Frosk)
Brønn navn	24/9-12
Seismisk lokalisering	DN15M01 IL 17793 DN15M01 XL 9475
Utvinningstillatelse	340
Boreoperatør	Aker BP ASA
Boretillatelse	1681-L
Boreinnretning	TRANSOCEAN ARCTIC
Boredager	42
Borestart	29.12.2017
Boreslutt	08.02.2018
Plugget dato	08.02.2018
Frigitt dato	08.02.2020
Publiseringsdato	08.02.2020
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	EOCENE
1. nivå med hydrokarboner, formasjon.	HORDALAND GP
Avstand, boredekk - midlere havflate [m]	24.0
Vanndybde ved midlere havflate [m]	120.0
Totalt målt dybde (MD) [m RKB]	2336.0
Totalt vertikalt dybde (TVD) [m RKB]	2326.0
Maks inklinasjon [°]	19.6
Temperatur ved bunn av brønnbanen [°C]	70
Eldste penetrerte alder	EOCENE
Eldste penetrerte formasjon	HEIMDAL FM



Geodetisk datum	ED50
NS grader	59° 20' 58.95" N
ØV grader	1° 49' 48.47" E
NS UTM [m]	6579730.07
ØV UTM [m]	433469.98
UTM sone	31
NPDID for brønnbanen	8331

Brønnhistorie

General

Well 24/9-12 S was drilled to test two prospects in the Vana Sub-basin in the North Sea. The primary objective was to test the hydrocarbon potential in Early Eocene injectite sands, the Frosk prospect. The secondary objective was to test the hydrocarbon potential in sandstones in the Paleocene Hermod Formation, the Marihøne B prospect.

Operations and results

Wildcat well 24/9-12 S was spudded with the semi-submersible installation Transocean Arctic on 29 December 2017. The well consist of two wellbores. The first wellbore was drilled to 2285 m (2275 m TVD) and proved oil in the primary target m. A technical side-track, 24/9-12 S T2, was then kicked off at 1777 m for coring and wire line logging. This wellbore was drilled to final TD at 2336 m (2326 m TVD) m in the Paleocene Heimdal Formation. Operations proceeded without significant problems. The well was drilled with Glydrill water-based mud down to 1360 m, m and with EMS 4600 oil-based mud from 1360 m to TD in both wellbores.

Top of the Frosk injectite complex was encountered at 1861.1 m (1851.4 m TVD), with top of main sands at 1884.9 m (1875 m TVD). The sand was oil filled with a biodegraded oil down to the oil-water contact at 1896 m (1885.7 m TVD). The same contact was seen in both wellbores. Top Hermod Formation sandstone was encountered at 2094 m (20184 m TVD) in both well bores. The Hermod Formation was water-wet with no shows. In the oil-bearing injectite sands there were oil shows on the cores, otherwise there were no oil shows above OBM in the wellbores.

Three cores were cut with 100% recovery in the interval 1856 to 1931.5 m in the technical side-track. The cores captured the entire injectite sand complex. MDT fluid samples were taken at 1863.2 m (oil), 1864.9 m (oil), 1866.1 m (oil), 1888.1 m (oil), 1892.4 m (oil), 1894.8 m (oil with formation water), 1894.81 m (oil), 1907 m (water with traces of oil), 1915 m (water), 2105.02 m (water), 2120.99 m (water), and 2237.99 m (water).

The well was permanently abandoned on 8 February 2018 as an oil discovery well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
170.00	2283.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1856.0	1882.5	[m]
2	1882.5	1911.5	[m]
3	1911.5	1931.4	[m]

Total kjerneprøve lengde [m]	75.4
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
144	NORDLAND GP
144	UNDIFFERENTIATED
274	UTSIRA FM
875	HORDALAND GP
875	UNDIFFERENTIATED
1120	GRID FM
1316	UNDIFFERENTIATED
1925	ROGALAND GP
1925	UNDIFFERENTIATED
1977	BALDER FM
2061	SELE FM
2094	HERMOD FM
2150	UNDIFFERENTIATED
2176	LISTA FM
2234	HEIMDAL FM

Logger



Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MWD LWD - DIR GR RES DEN NEU SON	1360	1779
MWD LWD - DIR GR RES SON	154	1360
MWD LWD - DIR PWD GR RES DEN NEU	1779	2285
MWD LWD - SON PRESSURE	1779	2285
T2 - MDT S XLD	1760	1894
T2 - MDT XLD QS	1760	2121
T2 - MWD LWD - DIR GR RES	1777	2335
T2 - MWD LWD - DIR GR RES DEN NE	1380	1777
T2 - MWD LWD - DIR GR RES S	154	1338
T2 - ZAIT NGI MSIP PEX HNGS IM	1760	2336

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	36	154.5	36	154.5	0.00	
INTERM.	13 3/8	1344.0	17 1/2	1360.0	0.00	
INTERM.	10 3/4	1766.0	12 1/4	1779.0	1.58	FIT
OPEN HOLE		2336.0	8 1/2	2336.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
281	1.21	17.0		Glydril	
784	1.19	18.0		Glydril	
1360	1.25	17.0		EMS 4600	
1360	1.29	17.0		Glydril	
1766	1.25	18.0		EMS 4600	
1766	1.28	19.0		EMS 4600	
1855	1.25	18.0		EMS 4600	
2285	1.27	16.0		EMS 4600	
2336	1.39	22.0		EMS 4600	
2336	1.25	19.0		EMS 4600	

