



General information





Wellbore name	2/1-17 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	2/1-17 S (Kark)
Well name	2/1-17
Seismic location	ABP18305-519. SP44 / ABP18305-118. SP292
Production licence	019 C
Drilling operator	Aker BP ASA
Drill permit	1780-L
Drilling facility	MAERSK INTERCEPTOR
Drilling days	71
Entered date	30.08.2019
Completed date	08.11.2019
Plugged and abandon date	08.11.2019
Release date	03.11.2020
Publication date	30.04.2021
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	JURASSIC
1st level with HC, formation	ELDFISK FM
Kelly bushing elevation [m]	56.4
Water depth [m]	65.5
Total depth (MD) [m RKB]	4390.0
Final vertical depth (TVD) [m RKB]	4379.0
Oldest penetrated age	LATE JURASSIC
Oldest penetrated formation	TYNE GP
Geodetic datum	ED50
NS degrees	56° 49' 6.13" N
EW degrees	3° 8' 19.54" E
NS UTM [m]	6297317.24
EW UTM [m]	508470.88
UTM zone	31
NPDID wellbore	8851



Wellbore history

General

Well 2/1-17 S was drilled to test the Kark prospect on the southern part of the Cod Terrace in the North Sea. The primary objective was to test the hydrocarbon potential of the informal Gyda Mbr of the Ula Formation. The potential of a deeper Ula Formation sand and the Eldfisk, Bryne and Skagerrak formations were secondary objectives.

Operations and results

A 9 7/8" pilot hole was drilled from seafloor to 591 m. No shallow gas was detected, and pore pressure was regarded as being hydrostatic at 1.03 sge.

Wildcat well 2/1-17 S was spudded with the jack-up installation Maersk Interceptor on 30 August 2019. Slow penetration rates in the 8 1/2" HPHT interval resulted in the decision to establish final TD at 4390 m (4379 m TVD) m, 222 m below the base of the Eldfisk Formation, within Late Jurassic mudstones of the Farsund Formation. The 8 1/2" bit drilled only 424 m in 41 days rig time. Hence, the secondary targets Bryne and Skagerrak formations were not reached.

The well was drilled with seawater and hi-vis pills down to 591 m, with Rheguard Prime oil-based mud from 591 m to 3966 m and with WARP SB oil-based mud from 3966 m to TD.

No Ula Formation sands were encountered in the well. A thicker than expected upper Jurassic Farsund mudstone package was encountered over the interval where the Ula sands had been expected. The Eldfisk Formation was encountered close to the prognosed depth and was hydrocarbon bearing with reasonable reservoir properties. However, the unit was only 5 m thick and is regarded as sub-commercial. High gas and resistivity values were recorded over

three short intervals in the Hod Formation and over one thin band in the Tor Formation. CPI analyses indicated the presence of oil in the Hod Formation, although the rock was deemed to be tight and the oil to be non-productible. Oil shows were detected in the Eldfisk Formation, otherwise there were no oil shows above the OBM in the well.

No conventional cores were cut. Good quality MDT oil samples were taken at 4167 m. OBM contamination in the samples varied between 0 and 3% of the flashed oil weight.

The well was permanently abandoned on 8 November 2019 as small oil discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
600.00	4390.00

Cuttings available for sampling?	YES
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**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
122	NORDLAND GP
122	UNDIFFERENTIATED
1878	HORDALAND GP
1878	UNDIFFERENTIATED
2921	ROGALAND GP
2921	BALDER FM
2942	SELE FM
2982	FORTIES FM
3023	LISTA FM
3040	ANDREW FM
3070	VIDAR FM
3159	LISTA FM
3179	VÅLE FM
3199	SHETLAND GP
3199	EKOFISK FM
3296	TOR FM
3650	HOD FM
3835	BLODØKS FM
3841	HIDRA FM
3853	CROMER KNOLL GP
3853	RØDBY FM
3880	SOLA FM
3895	TUXEN FM
3911	ÅSGARD FM
4002	TYNE GP
4002	FARSUND FM
4162	ELDFISK FM
4168	FARSUND FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AIT DOBMI PPC MSIP PEX HNGS	3950	4390
GR CMR B PPC NEXT C PPC	3950	4390
MWD - DI GR RES PWD	122	591



MWD - DI GR RES PWD SON DEN NUE	2512	3966
MWD - DI GR RES PWD SON GR	591	2512
MWD - DI GR RES PWD SON PRESS	3966	4106
MWD - DI GR RES PWD SON PRESS	4106	4390
MWD - GR RES PWD	0	0
PPC MDT GR	4167	4167
PPC XPT GR	3950	4230
TTRACK MSCT GR	3991	4377
TTRACK XL ROCK GR	4167	4169
XL ROCK	3950	4235

Casing and leak-off tests

Casing type	Casing diam. [inch]	Casing depth [m]	Hole diam. [inch]	Hole depth [m]	LOT/FIT mud eqv. [g/cm3]	Formation test type
CONDUCTOR	20	586.0	26	591.0	1.88	FIT
SURF.COND.	13 3/8	2507.0	16	2512.0	1.88	LOT
LINER	9 7/8	3959.0	12 1/4	3966.0	2.23	LOT
OPEN HOLE		4380.0	8 1/2	4380.0	0.00	