

**General information**

Wellbore name	2/11-12 A
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	2/11-12
Seismic location	ABPN217 random line
Production licence	033
Drilling operator	Aker BP ASA
Drill permit	1745-L
Drilling facility	MAERSK INTERCEPTOR
Drilling days	23
Entered date	13.02.2019
Completed date	07.03.2019
Plugged and abandon date	07.03.2019
Release date	07.03.2021
Publication date	30.04.2021
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	55.0
Water depth [m]	70.5
Total depth (MD) [m RKB]	3427.0
Final vertical depth (TVD) [m RKB]	3245.0
Oldest penetrated age	PERMIAN
Oldest penetrated formation	ZECHSTEIN GP
Geodetic datum	ED50
NS degrees	56° 10' 10.93" N
EW degrees	3° 26' 12.54" E
NS UTM [m]	6225190.98
EW UTM [m]	527125.04
UTM zone	31
NPDID wellbore	8640



Wellbore history

General

Well 2/11-12 A "West Hod Exploration" is a geological side-track to 2/11-12 S. It was drilled on the Skrubbe Fault between the Lindesnes Ridge and the Ål Basin in the North Sea. The purpose of 2/11-12 A was to assess the hydrocarbon potential below the Shetland Group. The primary reservoir target was Late Jurassic sandstones. The Early Cretaceous Tuxen Formation and Paleozoic rocks were secondary targets. The stratigraphy below BCU was highly uncertain. Base case for TD was around 300 m into the Paleozoic, at 3500 m TVDSS.

Operations and results

Wildcat well 2/11-12 A was kicked off at 1440 m in 2/11-12 S on 19 January 2019. It was drilled with the jack-up installation Mærsk Interceptor to TD at 3427 m (3244.5 m TVD) in the Permian Zechstein Group halite. Wellbore breathing/ballooning in the Mandal Formation caused several gas peaks and a sudden mud loss at 3245 m. The mud weight was adjusted, and drilling commenced. The losses were gradually reduced and stopped at 3253 m. The well was drilled with oil-based mud from kick-off to TD.

The well did not encounter reservoir in the primary Late Jurassic exploration target. Due to lack of Jurassic reservoir and the unexpected occurrence of Zechstein salt TD was set early. No Paleozoic reservoir was penetrated. In the Lower Cretaceous, the well encountered a carbonate-rich rock of about 45 metres in the Tuxen and Åsgard formations with poor reservoir properties. Petrophysical analyses indicated traces of oil, and oil shows in the form of direct and cut fluorescence was recorded in the interval 3094 to 3118 m in the Tuxen Formation limestone. The shows were confirmed by organic geochemical analysis of sidewall cores. Cut fluorescence and residual ring was observed also in Zechstein limestone at 3389 to 3394 m.

No conventional cores were cut. No fluid sample was taken.

The well was permanently abandoned on 7 March 2019 as a well with shows.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1430.00	3427.00

Cuttings available for sampling?	YES
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Lithostratigraphy



Top depth [mMD RKB]	Lithostrat. unit
126	NORDLAND GP
126	UNDIFFERENTIATED
1508	HORDALAND GP
1508	NO FORMAL NAME
2146	LISTA FM
2163	NO FORMAL NAME
2888	ROGALAND GP
2888	BALDER FM
2904	SELE FM
2965	VÅLE FM
2988	SHETLAND GP
2988	EKOFISK FM
3001	TOR FM
3009	NO FORMAL NAME
3026	HOD FM
3059	BLODØKS FM
3060	CROMER KNOLL GP
3060	RØDBY FM
3082	SOLA FM
3090	TUXEN FM
3114	ÅSGARD FM
3140	TYNE GP
3140	MANDAL FM
3390	ZECHSTEIN GP

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - GR ECD RES GR SON	541	1435
LWD - GR ECD RES NEU DEN PRES NM	3090	3427
LWD - GR ECD RES NEU DEN SON	1382	3090
LWD - GR RES ECD SON	125	540
MSCT GR	3097	3126
PPC MSIP PEX HNGS GR	2600	3416

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	535.8	26	541.0	1.63	LOT
PILOT HOLE		540.0	9 7/8	540.0	0.00	
INTERM.	13 3/8	1426.4	16	1435.0	1.95	LOT
INTERM.	9 7/8	3082.8	12 1/4	3090.0	1.98	FIT
OPEN HOLE		3427.0	8 1/2	3427.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
130	1.02			Sea water	
428	1.57	32.0		RheGuard Prime	
1210	1.02			Sea water	
1370	1.74	53.0		RheGuard Prime	
1943	1.73	44.0		RheGuard Prime	
2550	1.74	50.0		RheGuard Prime	
3080	1.73	46.0		RheGuard Prime	
3090	1.73	46.0		RheGuard Prime	
3090	1.79	39.0		Warp	
3140	1.79	38.0		Warp	
3254	1.78	38.5		Warp	
3426	1.78	36.0		Warp	
3426	1.74	50.0		Warp	