



General information

Wellbore name	2/11-12 S
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Field	HOD
Discovery	2/11-2 Hod
Well name	2/11-12
Seismic location	ABPN217 random line
Production licence	033
Drilling operator	Aker BP ASA
Drill permit	1744-L
Drilling facility	MAERSK INTERCEPTOR
Drilling days	34
Entered date	10.01.2019
Completed date	12.02.2019
Plugged date	12.02.2019
Release date	12.02.2021
Publication date	30.04.2021
Purpose - planned	APPRAISAL
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	55.0
Water depth [m]	70.5
Total depth (MD) [m RKB]	2956.0
Final vertical depth (TVD) [m RKB]	2939.0
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	HIDRA FM
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	8639



Wellbore history

General

Well 2/11-12 S "West Hod Appraisal" was drilled as part of the Hod Field Development Project (HFD). The well is located on the Skrubbe Fault between the Lindesnes Ridge and the Ål Basin in the North Sea. The primary objective for appraisal well 2/11-12 S was to delineate the western part of the Hod field. The secondary objective was to examine reservoir rocks (diatomites) in the Miocene in the Hordaland group (Lark Formation).

Operations and results

A 9 7/8" Pilot hole was drilled to 540 m. No shallow gas or water flow was observed.

Appraisal well 2/11-12 S was spudded with the jack-up installation Mærsk Interceptor on 10 January 2019 and drilled to TD at 2956 m (2939 m TVD) m in the Late Cretaceous Hydra Formation. An abrupt mud loss at 2731 m MD in the lower Balder Formation was observed, with initial mud loss rate at 23 m³/hr. This mud loss was observed to rapidly diminish by 2750 m MD upon further drilling into the underlying Sele Formation. A fault is possible in this interval. The well was drilled with seawater and hi-vis pills down to 541 m and with oil-based mud from 540 m to TD.

In the primary target in the Hod formation, a limestone interval of about 120 meters with poor reservoir properties was encountered. There were traces of oil in the limestone rocks. Good shows were recorded in the interval 2841 to 2859 (stain, direct fluorescence, cut fluorescence, and ring fluorescence), and in the intervals 2907 to 2916 m and 2937 to 2943 m (no stain, direct fluorescence, cut fluorescence, no residual ring).

In the secondary target in the Hordaland group, 200 metres of reservoir rocks with poor reservoir properties and traces of oil were encountered. Good shows were recorded in the intervals 1554 to 1560 m and 1617 to 1647 m (strong petroleum smell, no stain, direct fluorescence, cut fluorescence and ring fluorescence).

The Miocene target was cored in 5 cores from 1485 m to 1674.3 m. The Chalk target was not cored. MDT fluid samples were taken in the Miocene at 1538 m (oil), and in the chalk at 2838 m (water with 5 cm³ oil), 2840.6 m (oil with 10 cm³ water) and 2846.8 m (oil with 10 cm³ water). Analyses of the samples from the chalk showed mud contamination between 40% and 75% in the oil fractions.

The well was permanently abandoned on 12 February 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]
550.00	2955.00

Cuttings available for sampling?	YES
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**Cores at the Norwegian Offshore Directorate**

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	1485.0	1515.7	[m]
2	1518.5	1551.5	[m]
3	1551.6	1609.2	[m]
4	1610.5	1647.2	[m]
5	1653.5	1674.0	[m]

Total core sample length [m]	178.3
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
126	NORDLAND GP
126	UNDIFFERENTIATED
1508	HORDALAND GP
1508	NO FORMAL NAME
2062	NO FORMAL NAME
2721	ROGALAND GP
2721	BALDER FM
2735	SELE FM
2777	LISTA FM
2830	VÅLE FM
2837	EKOFISK FM
2842	SHETLAND GP
2842	HOD FM
2945	BLODØKS FM
2946	HIDRA FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
FTNG	1527	1683
FTNG	1538	2846



HNGS PEX MSIP QG ZAIT	1426	1773
LWD - ECD RES GR	1435	1485
LWD - GR ECD RES NØ DEN SON	1485	2955
LWD - GR ECD RES SON	541	1435
LWD - GR RES ECD SON	125	540
MDT MF	1435	1774
UIB GPIT PPC GR	1490	2945
XLR SWC	2723	2943
XPT ADT MRX NEXT	1426	1773
XPT ADT NEXT MRX	1426	2996
ZAIT NGI MSIP PEX HNGS	1426	2996

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
OPEN HOLE		2955.7	8 1/2	2955.7	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1	1.05			Bentonite	
1	1.02			Sea water in well.	
1	1.31	20.0		Glydril WBM/ Displacementmud.	
542	1.39	29.0		RheGuard Prime	
1047	1.41	31.0		RheGuard Prime	
1282	1.51	34.0		RheGuard Prime	
1366	1.73	43.0		RheGuard Prime	
1435	1.57	36.0		RheGuard Prime	
1437	1.69	35.0		RheGuard Prime	
1485	1.73	37.0		RheGuard Prime	
2455	1.75	39.0		RheGuard Prime	
2630	1.73	36.0		RheGuard Prime	
2768	1.75	37.0		RheGuard Prime	



2879	1.73	38.0		RheGuard Prime	
2955	1.75	38.0		RheGuard Prime	