General information

Wellbore name	1/3-13
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	1/3-13
Seismic location	OMV20M02: Inline 23905. crossline 18896
Production licence	970
Drilling operator	OMV (Norge) AS
Drill permit	1863-L
Drilling facility	MAERSK INTEGRATOR
Drilling days	22
Entered date	16.06.2021
Completed date	07.07.2021
Plugged and abondon date	07.07.2021
Release date	01.03.2023
Publication date	01.03.2023
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	PALEOCENE
1st level with HC, formation	FORTIES FM
2nd level with HC, age	PALEOCENE
2nd level with HC, formation	ANDREW FM
Kelly bushing elevation [m]	53.0
Water depth [m]	71.0
Total depth (MD) [m RKB]	3341.0
Final vertical depth (TVD) [m RKB]	3338.0
Maximum inclination [°]	5.4
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	TOR FM
Geodetic datum	ED50
NS degrees	56° 50' 52.86'' N
EW degrees	2° 44' 26.34'' E
NS UTM [m]	6300638.87

EW UTM [m]	484180.11
UTM zone	31
NPDID wellbore	9334

Wellbore history

General

Well 1/3-13 was drilled to test the Ommadawn prospect on the border between the Hidra High and the Breiflabb Basin in the North Sea. The well was drilled near the 1/3-11 (Ipswich) oil discovery from 2008, which found oil in the Forties and Andrew formations. The primary objective of 1/3-13 was to test the hydrocarbon potential of the Tor Formation.

Operations and results

Wildcat well 1/3-13 was spudded with the jack-up installation Maersk Integrator on 16 June 2021 and drilled to TD at 3341 m the Late Cretaceous Tor Formation. Drilling started with a pilot hole down to 920 m to check for shallow gas. Boulders were encountered at 270 m and 10 hrs were lost due to stuck pipe at this point. No shallow gas was encountered. The main well was initiated on 18 June. Losses occurred at TD, possibly related to a fault. Due to this and a dry Tor Formation the well was TD'd. The well was drilled with seawater and hi-vis pills down to 796 m and with Rheguard oil-based mud from 796 m to TD.

The target Tor Formation was encountered water-wet at 3238 m. However, unexpectedly the well encountered hydrocarbon bearing sands in the overlying Forties and Andrew formations from 3025 to 3037 m and 3073 to 3093 m, respectively. No pressure points or fluid samples were acquired in these sands, so pressure communication with the Forties and Andrea sands in the 13/1-11 Ipswich discovery could not be confirmed. The fluid type was interpreted as oil based on LWD logs and gas readings.

In the cuttings no shows could be distinguished above the OBM background fluorescence.

Due to dry target, no cores were cut, and no fluid sample was taken.

The well was permanently abandoned on 7 July 2021.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
940.00	3341.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
168	NORDLAND GP
1747	HORDALAND GP
1747	UNDIFFERENTIATED
2418	VADE FM
2425	UNDIFFERENTIATED
2945	ROGALAND GP
2945	BALDER FM
2955	SELE FM
3024	FORTIES FM
3050	LISTA FM
3072	ANDREW FM
3094	LISTA FM
3129	VÅLE FM
3147	EKOFISK FM
3238	SHETLAND GP
3238	TOR FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - ARC TELE	124	920
LWD - ARC TELE SONSCOPE	920	1707
LWD - ARC TELE SONSCOPE SADN	1707	3125
LWD - GCR ECOSCOPE TELE	3125	3341
MSIP XPT GR	3125	3341
USIT CBL GR	125	920

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	913.3	26	920.0	1.65	FIT
INTERM.	13 3/8	1699.7	17 1/2	1707.0	1.95	FIT
INTERM.	9 7/8	3118.8	12 1/4	3125.0	1.96	LOT
OPEN HOLE		3341.0	8 1/2	3341.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
210	1.25	15.0	10.5	Glydril mud	
1287	1.49	23.0	17.0	Rheguard Prime	
1707	1.54	27.0	20.0	Rheguard Prime	
1726	1.59	34.0	22.0	Rheguard Prime	
3125	1.73	37.0	21.0	Rheguard Prime	
3128	1.71	31.0	14.0	Rheguard Prime	
3341	1.71	34.0	15.0	Rheguard Prime	