

**General information**

Wellbore name	16/1-30 A
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	SYMRA
Discovery	16/1-29 S Symra
Well name	16/1-30
Seismic location	LN12M02R16 Inline: 4701 Xline: 4139
Production licence	167
Drilling operator	Equinor Energy AS
Drill permit	1765-L
Drilling facility	WEST PHOENIX
Drilling days	18
Entered date	02.07.2019
Completed date	19.07.2019
Plugged and abandon date	19.07.2019
Release date	19.07.2021
Publication date	19.11.2021
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	JURASSIC
1st level with HC, formation	VIKING GP
2nd level with HC, formation	GRID FM
Kelly bushing elevation [m]	38.6
Water depth [m]	114.0
Total depth (MD) [m RKB]	2075.0
Final vertical depth (TVD) [m RKB]	1990.0
Oldest penetrated formation	BASEMENT
Geodetic datum	ED50
NS degrees	58° 58' 50.71" N
EW degrees	2° 16' 50.88" E
NS UTM [m]	6538281.90
EW UTM [m]	458655.69



UTM zone	31
NPDID wellbore	8749

Wellbore history

Well 16/1-30 A Lille Prinsen Outer Wedge was drilled to appraise the 16/1-29 Lille Prinsen Discovery in the north-western part of the Utsira High in the North Sea. The structure was first tested by wells 16/1-6S and 16/1-6 A, which made the Verdandi Discovery in the Eocene Grid and the Paleocene Heimdal formations. The Lille Prinsen prospect is mapped in several geographically separate segments at Basement to Base Cretaceous level. These segments are: The Permian Main Carbonate Discovery penetrated by 16/1-29 S, the western Outer Wedge segment, and segments 2,3 and 5 (Carbonate upsides). The primary well 16/1-30 S found oil in Intra-Draupne Formation sandstone in the Outer Wedge segment. The objective of 16/1-30 A was to verify lateral reservoir distribution and quality of the Outer Wedge reservoir units.

Operations and results

Wildcat well 16/1-30 A is a geological side-track to 16/1-30 S. It was kicked off at 1307.2 m on 2. July 2019 with the semi-submersible installation West Phoenix and drilled to TD at 2075 m (1989 m TVD) m in Basement rock. Operations proceeded without significant problems. The well was drilled with Versatec oil-based mud from kick-off to TD.

Well 16/1-30 A encountered Viking Group sandstone and Basement Group granite reservoirs. Some shows were observed on the core chips from the Intra-Heather reservoir. MDT pressure points showed an oil gradient in Intra-Heather Formation sandstone down to 2031 m (1951.2 m TVD). Good shows with fluorescence odour and stain were recorded from top Intra-Heather Formation sandstone down to ca 2030 m. The log responses in Basement indicate the granite is oil filled at the top and water-bearing below ca 2045 m. However, MDT pressure logging gave no valid pressure points here (tight) and no shows were observed.

Two cores were cut. Core 1 was cut from 1993 to 2029 m with 92.3% recovery, capturing Shetland Group claystone and limestone and Intra-Heather Formation reservoir sandstone. The core-log depth shift is 2.3 m. Core 2 was cut from 2030 to 2039.46 m with 72.8% recovery, capturing basal Heather Formation claystone and granitic basement. The core-log depth shift is 4.5 m. MDT fluid samples were taken at 2026.5 m (oil with 6% OBM contamination) in Intra-Heather Formation sandstone.

The well was permanently abandoned on 19 July 2019 as an oil appraisal well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1310.00	2066.00

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	1993.0	2030.0	[m]
2	2030.0	2039.5	[m]

Total core sample length [m]	46.4
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
2004.0	[m]	C	CGG
2019.0	[m]	C	CGG
2022.0	[m]	C	CGG
2030.0	[m]	C	CGG
2036.0	[m]	C	CGG

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
150	NORDLAND GP
779	UTSIRA FM
1005	HORDALAND GP
1051	SKADE FM
1143	UNDIFFERENTIATED
1440	GRID FM
1550	UNDIFFERENTIATED
1812	ROGALAND GP
1812	BALDER FM
1874	SELE FM
1881	LISTA FM
1980	VÅLE FM
2003	SHETLAND GP
2008	VIKING GP
2008	HEATHER FM
2011	INTRA HEATHER FM SS



2035	HEATHER FM
2041	BASEMENT

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AIT PEX HNGS	1977	2065
CMR MDT	2005	2056
MWD LWD - TELE ARC	1978	2075
MWD LWD - XCEED ARC TELE	1307	1978
UIB MSIP	1977	2062

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	36	202.0	42	203.0	0.00	
SURF.COND.	20	567.0	36	572.0	0.00	
INTERM.	13 3/8	1300.0	16	1301.0	1.55	FIT
LINER	9 5/8	1977.0	12 1/4	1978.0	1.92	LOT
OPEN HOLE		2075.0	8 1/2	2075.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1960	1.09	14.0		Versatec	
2030	1.09	13.0		Versatec	
2075	1.09	14.0		Versatec	