



General information

Wellbore name	17/8-1
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	17/8-1
Seismic location	LO1101LNR19. inline 3146. crossline 4422
Production licence	976
Drilling operator	Lundin Norway AS
Drill permit	1868-L
Drilling facility	DEEPSEA STAVANGER
Drilling days	15
Entered date	16.09.2021
Completed date	23.10.2021
Plugged date	23.10.2021
Release date	23.10.2023
Publication date	12.09.2023
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	30.0
Water depth [m]	119.0
Total depth (MD) [m RKB]	2921.0
Final vertical depth (TVD) [m RKB]	2921.0
Maximum inclination [°]	0.56
Bottom hole temperature [°C]	112
Oldest penetrated age	PERMIAN
Oldest penetrated formation	UNDIFFERENTIATED
Geodetic datum	ED50
NS degrees	58° 27' 6.11" N
EW degrees	3° 31' 9.19" E
NS UTM [m]	6479266.03
EW UTM [m]	530304.53
UTM zone	31
NPDID wellbore	9384



Wellbore history

General

Well 17/8-1 was drilled to test the Dovregubben prospect on the Sele High in the North Sea. The primary objective was to seek hydrocarbons in Middle Jurassic Sandnes Formation sandstones and establish its reservoir facies and quality. The secondary objective was to seek hydrocarbons in Permian Zechstein carbonates and/or Rotliegend clastics and establish their facies and quality. A third objective was to drill a section of the underlying Paleozoic stratigraphy to establish its facies and possible prospectivity.

Operations and results

A 9 7/8" shallow borehole 17/8-U-1 was drilled to check for shallow gas. It was drilled simultaneously with the top-hole sections of well 17/8-1 in a dual-drilling operation. The surface location of the shallow borehole was offset 10 m from the 17/8-1 location. No indication of shallow gas or shallow water flow was observed.

Wildcat well 17/8-1 was spudded with the semi-submersible installation Deepsea Stavanger on 16 September 2021 and drilled to TD at 2921 m in undifferentiated Paleozoic clastics. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 1005 m, with Rheguard Prime oil-based mud from 1005 m to 2343 m, and with Glydril Plus mud from 2343 m to TD.

The well encountered 18 metres of the Sandnes and Bryne formations from the Middle Jurassic, 10 metres of which comprised sandstone with good reservoir quality. In the secondary exploration target, the well encountered about 70 metres of tight carbonate rocks in the Zechstein Group, which rest unconformably on dipping Paleozoic clastics below. Eighty-four metres of tight conglomerates, sandstone and claystone were drilled below this unconformity above well TD. It is not believed that these clastics represent the Rotliegend Group. The well also encountered 201 metres of Triassic section (Skagerrak and Smith Bank formations) the upper ca. 120 metres of which was sandstone, with poor to moderate reservoir quality. There were no oil shows in the well and gas levels were low throughout. XPT pressure points through the Jurassic and Triassic all lie on a common near hydrostatic water gradient of 1.06 g/cm³.

A sidewall core from 2836.2 m in the 2-metre thick Kupferschiefer Formation showed an elevated TOC content and excellent source rock properties.

No conventional coring was performed; however, extensive data acquisition was carried out including MWD/LWD

and wireline logging. 30 sidewall cores were cut in the reservoir section.

The well was permanently abandoned on 23 October 2021 as a dry well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate



Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1020.00	2922.00

Cuttings available for sampling?	YES
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Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
149	NORDLAND GP
490	HORDALAND GP
490	UNDIFFERENTIATED
871	UNDIFFERENTIATED
968	ROGALAND GP
968	BALDER FM
994	SELE FM
1006	LISTA FM
1015	VÅLE FM
1025	SHETLAND GP
1025	EKOFISK FM
1059	TOR FM
1154	HOD FM
1467	TRYGGVASON FM
1485	SVARTE FM
1540	CROMER KNOLL GP
1540	RØDBY FM
1636	SOLA FM
1790	ÅSGARD FM
2297	BOKNFJORD GP
2297	FLEKKEFJORD FM
2346	SAUDA FM
2393	TAU FM
2417	EGERSUND FM
2435	VESTLAND GP
2435	SANDNES FM
2443	BRYNE FM
2455	NO GROUP DEFINED
2455	GASSUM FM
2466	HEGRE GP
2466	SKAGERRAK FM
2544	SMITH BANK FM



2658	ZECHSTEIN GP
2658	UNDIFFERENTIATED
2836	KUPFERSCHIEFER FM
2838	UNDEFINED GP

Logs

Log type	Log top depth [m]	Log bottom depth [m]
FMIHD PPC MSIP PPC GR JAR	1850	2923
LWD - PDORBIT ARC ROS	216	996
LWD - PDORBIT ARC ROS SS SADN	999	2333
LWD - PSORBIT MI DVMT ROS SS	2337	2917
LWD - TELE	140	215
VSI4	268	2916
XLR GR	2367	2916
XPT NEXT HRLA PEX HNGS GR JAR	2338	2923

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	30	215.4	36	215.4	0.00	
SURF.COND.	13 3/8	1000.1	17 1/2	1005.0	1.82	LOT
PROD.	9 5/8	2337.0	12 1/4	2343.0	1.97	LOT
OPEN HOLE		2921.0	8 1/2	2921.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
215	1.05	1.0	1.0	Other	
1005	1.03	1.0	1.0	Other	
1008	1.29	30.0	8.6	Rheguard Prime	
2343	1.20	18.0	8.6	Glydril PLUS	
2921	1.03			Other	
2921	1.20	15.0	10.5	Glydril PLUS	