General information

Wellbore name	25/10-12 S
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	25/10-12
Seismic location	LN 12M02-inline 2519 & crossline 4597
Production licence	625
Drilling operator	Lundin Norway AS
Drill permit	1489-L
Drilling facility	ISLAND INNOVATOR
Drilling days	84
Entered date	27.10.2014
Completed date	18.01.2015
Release date	18.01.2017
Publication date	23.01.2017
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	30.0
Water depth [m]	116.0
Total depth (MD) [m RKB]	2597.0
Final vertical depth (TVD) [m RKB]	2570.0
Maximum inclination [°]	13.7
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	SMITH BANK FM
Geodetic datum	ED50
NS degrees	59° 2' 36.72'' N
EW degrees	2° 18' 13.11'' E
NS UTM [m]	6545258.72
EW UTM [m]	460041.59
UTM zone	31
NPDID wellbore	7293

Wellbore history

General

Well 25/10-12 S was drilled to test the Kopervik Prospect on the west flank of the Utsira High, close to the Hanz Field in the North Sea. The primary objective was to test the hydrocarbon potential of Late Jurassic Intra-Draupne Formation sandstone. Secondary objective was sandstones in the Early-Middle Jurassic sequence (Statfjord-Sleipner-Hugin units)

Operations and results

Wildcat well 25/10-12 S was spudded with the semi-submersible installation Island Innovator on 27 October 2014. The well was drilled to a total depth of 1800 m in Early Eocene sediments in the Hordaland Group. While running the 9 5/8" casing, the string became differentially stuck at 1520 m. The well was plugged back to the 20" casing shoe and technically sidetracked as 25/10-12 ST2. The latter was drilled to final TD at 2597 m (2570 m TVD) in the Smith Bank Formation. Only MWD logs are available from the well. Wireline logging was attempted at TD of the 8 1/2" hole, however, due to problems below the 9 5/8" casing shoe, no logging was possible. The well was drilled with seawater and high viscosity pills down to 558 and with Aquadril mud from 558 m to TD.

Top Draupne Formation was penetrated at 2114 m (2087.3 m TVD). The Draupne Formation in the well consists of mudstones and interbedded thin beds of spiculitic sandstones. At 2124 m (2097.3 m TVD), the base of Draupne, there is a 1.7 m thick Intra-Draupne Formation sandstone. The well also penetrated 21 m and 19.5 m of high quality sand belonging to the Hugin and Sleipner Formations respectively, and approximately 198 m of Statfjord Group sediments with several well-developed sandy intervals. Some weak oil-shows were described in the Intra Draupne sandstones and in the Hugin-Sleipner sandstones, but no stain or cut were observed. The LWD pressure measurements showed a complex depletion history with five different pressure regimes implying several sealing intervals. The pressure points in the Triassic were hydrostatic.

Four conventional cores were cut in the sidetrack. Cores 1 and 2 were cut from 2113 to 2136 m with 79 % total recovery. The core-log depth shift was 1.2 m for both cores. Cores 3 and 4 were cut from 2157 to 2201 m with 93 % total recovery. The core-log depth shift was 0.0 m for both cores. Formation pressures were acquired using a Baker TesTrak LWD tool No fluid sample was taken.

The well was permanently abandoned on 18 January 2015 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]
560.00	1800.00

Cuttings available for sampling?	YES

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2113.0	2129.7	[m]
2	2132.0	2133.6	[m]
3	2157.0	2181.9	[m]
4	2182.8	2198.9	[m]

Total core sample length [m]	59.3
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
146	NORDLAND GP
146	UNDIFFERENTIATED
709	UTSIRA FM
790	UNDIFFERENTIATED

857	HORDALAND GP
857	UNDIFFERENTIATED
862	SKADE FM
1012	NO FORMAL NAME
1122	UNDIFFERENTIATED
1410	NO FORMAL NAME
1549	NO FORMAL NAME
1597	GRID FM
1612	NO FORMAL NAME
1885	ROGALAND GP
1885	BALDER FM
1934	SELE FM
1942	LISTA FM
1986	HEIMDAL FM
2042	LISTA FM
2078	VÅLE FM
2081	SHETLAND GP
2081	EKOFISK FM
2086	HOD FM
2107	CROMER KNOLL GP
2107	ÅSGARD FM
2114	VIKING GP
2114	DRAUPNE FM
2126	HEATHER FM
2153	VESTLAND GP
2153	HUGIN FM
2174	NO FORMAL NAME
2194	DUNLIN GP
2194	AMUNDSEN FM
2241	STATFJORD GP
2241	NANSEN FM
2249	EIRIKSSON FM
2324	NO FORMAL NAME
2439	HEGRE GP
2439	SKAGERRAK FM
2540	SMITH BANK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MDT	2072	2072
MDT	2074	2074
MWD - ATK3 OTKII SDTK CCN ORD ZT	1370	2076
MWD - ATK3 OTKIISDTK ZTK BCPM NB	495	585
MWD - OTK BCPM APX	137	556
MWD - OTK BCPM2 LTK SD ZTKG	2022	2597
MWD - OTK BCPM2 ZTKG TTK	2315	2485
MWD - OTKII NBG BRES APX	494	1436
XPT	2078	2078
XPT	2080	2080
XPT CALI	2080	2080
XPT CHAIN	2078	2078

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	213.3	36	218.0	0.00	
SURF.COND.	20	551.0	26	558.0	1.69	LOT
PILOT HOLE		558.0	9 7/8	558.0	0.00	
INTERM.	13 3/8	1428.1	17 1/2	1436.0	1.86	LOT
LINER	9 5/8	2068.0	12 1/4	2076.0	1.81	LOT
OPEN HOLE		2597.0	8 1/2	2597.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
190	1.40	12.0		Water Based	
300	1.03	1.0		Water Based	
425	1.25	16.0		Water Based	
558	1.04	30.0		Water Based	
648	1.18	17.0		Water Based	
905	1.35	19.0		Water Based	
1267	1.18	14.0		Water Based	
1350	1.40	29.0		Water Based	

1351	1.18	13.0		Water Based	
1416	1.40	24.0		Water Based	
1436	1.18	15.0		Water Based	
1550	1.40	23.0		Water Based	
2032	1.30	17.0		Water Based	
2201	1.16	11.0		Water Based	
2597	1.14	9.0		Water Based	
2597	1.22	10.0		Water Based	