

**General information**

Wellbore name	16/2-7 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	JOHAN SVERDRUP
Discovery	16/2-6 Johan Sverdrup
Well name	16/2-7
Seismic location	LN0902 inline 4811 & crossline 3522
Production licence	501
Drilling operator	Lundin Norway AS
Drill permit	1374-L
Drilling facility	BREDFORD DOLPHIN
Drilling days	28
Entered date	02.09.2011
Completed date	29.09.2011
Release date	29.09.2013
Publication date	29.09.2013
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	LATE JURASSIC
1st level with HC, formation	INTRA DRAUPNE FM SS
2nd level with HC, age	MIDDLE JURASSIC
2nd level with HC, formation	SLEIPNER FM
Kelly bushing elevation [m]	25.0
Water depth [m]	113.0
Total depth (MD) [m RKB]	2100.0
Final vertical depth (TVD) [m RKB]	2010.0
Maximum inclination [°]	26.3
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50
NS degrees	58° 46' 47.77" N
EW degrees	2° 39' 16.28" E



NS UTM [m]	6515749.45
EW UTM [m]	480024.06
UTM zone	31
NPDID wellbore	6711

Wellbore history

General

Well 16/2-7 A is a geologic sidetrack to well 16/2-7 drilled about 5.5 kilometres southeast of the discovery well for the oil discovery 16/2-6 (Avaldsnes) on the Utsira High in the North Sea. Well 16/2-7 confirmed the Avaldsnes Discovery OWC at 1922 m TVD MSL

Operations and results

Appraisal well 16/2-7 A was drilled with the semi-submersible installation on Bredford Dolphin. It was kicked off from below the 20" shoe at 708 m in primary wellbore 16/2-7 on 2 September 2011 and drilled to a total depth of 2100 m (2010 m TVD) in the Triassic Skagerrak Formation. The sidetrack well was drilled conventionally with 12 1/4" and 8 1/2" sections using Performadril water based mud all through. No significant problem was encountered in the operations.

The geological sidetrack penetrated the BCU and top Intra Draupne Formation sandstone reservoir according to prognosis at 2014 m (1931 m TVD). The Draupne sandstone rested unconformable on a 14 m TVD thick Sleipner Formation sandstone with top at 2024 m (1940 m TVD). The Draupne sandstone thickness variation going from 25 m TVD in 16/2-7 to 9 m TVD in 16/2-7 A is attributed to Late Jurassic faulting. As in 16/2-7 Pressure points and MDT sampling results confirmed the presence of oil in the reservoir with a free water level at approximately 2032 m (1947.5 m TVD).

Two cores were cut from 2012 to 2054 m across the Draupne and Hugin formations. MDT wire line fluid samples were taken at 2015.8 m (oil), 2031.29 m (oil), 2035.19 m (water), and 2036.95 m (water).

The well was permanently abandoned on 29 September 2011 as an oil appraisal.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
720.00	2100.00

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	2012.0	2038.8	[m]
2	2039.0	2052.9	[m]

Total core sample length [m]	40.7
Cores available for sampling?	YES

Oil samples at the Norwegian Offshore Directorate

Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
MDT		2031.30	0.00	OIL	19.09.2011 - 00:00	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
138	NORDLAND GP
794	UTSIRA FM
893	NO FORMAL NAME
982	HORDALAND GP
982	SKADE FM
1030	NO FORMAL NAME
1414	NO FORMAL NAME
1436	ROGALAND GP
1436	BALDER FM
1464	SELE FM
1480	LISTA FM
1551	SHETLAND GP
1551	EKOFISK FM
1568	TOR FM
1672	HOD FM
1804	BLODØKS FM
1830	SVARTE FM
1870	CROMER KNOLL GP
1870	RØDBY FM
1968	SOLA FM



1975	ÅSGARD FM
2011	VIKING GP
2011	DRAUPNE FM
2014	INTRA DRAUPNE FM SS
2024	VESTLAND GP
2024	SLEIPNER FM
2039	STATFJORD GP
2041	HEGRE GP
2041	SKAGERRAK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR CPT GR	2015	2084
FMI MSIP GR	1882	2099
MDT GR	2015	2037
MSCT GR	1892	2072
MSCT GR	2075	2080
MWD LWD - GR REMP DEN NEU AC	663	2097
PEX HRLA ECS HNGS	1882	2087

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
684	1.35	15.0		Sacrificial mud	
699	1.35	27.0		PERFORMADRILL	
1028	1.35	33.0		PERFORMADRILL	
1690	1.39	26.0		PERFORMADRIL	
1888	1.37	47.0		PERFORMADRILL	
2100	1.20	25.0		PERFORMADRILL	

Pressure plots

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.





Document name	Document format	Document size [MB]
6711 Formation pressure (Formasjonstrykk)	pdf	0.22

