

**General information**

Wellbore name	16/1-20 A
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	16/1-20
Seismic location	Survey LN12M02 3D .spudlokasjon-inline 2073 & crossline 3768
Production licence	457
Drilling operator	Wintershall Norge AS
Drill permit	1459-L
Drilling facility	BORGLAND DOLPHIN
Drilling days	41
Entered date	21.08.2013
Completed date	21.10.2013
Plugged date	21.10.2013
Release date	21.10.2015
Publication date	25.10.2015
Purpose - planned	APPRAISAL
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	31.0
Water depth [m]	113.0
Total depth (MD) [m RKB]	3106.0
Final vertical depth (TVD) [m RKB]	2563.0
Maximum inclination [°]	49
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50
NS degrees	58° 54' 24.39" N
EW degrees	2° 18' 14.14" E
NS UTM [m]	6530030.37
EW UTM [m]	459899.46
UTM zone	31
NPDID wellbore	7256

**Wellbore history****General**

Well 16/1-20 A was drilled on the Asha East prospect about two and a half kilometres east of appraisal wells 16/1-16 and 16/1-16 A on the Ivar Aasen field, and about three kilometres north of the Edvard Grieg field in the central part of the North Sea. The well is an appraisal well to the 16/1-16 Asha Discovery and the primary objective was to investigate if the hydrocarbon accumulation in the Hugin found in the Asha well spilled eastwards into the fault bound dip closure against the Utsira High Fault. Secondary target were younger sands of Late Jurassic and Early Cretaceous age.

Operations and results

Appraisal well 16/1-20 A was drilled with the semi-submersible installation Borgland Dolphin. It was drilled in tandem with the 16/1-19 S Amol well. After drilling the 16/1-19 S Amol well to 604 m and set 13 3/8" casing at 597 m, the Amol well was suspended in order to drill 16/1-20 A Asha East 12 1/4" section. Drilling operations on Asha East were severely hampered by hole stability problems in the 12 1/4" hole section. Two attempts to drill the Asha East well were conducted from 20 August to 4 September 2013 without success. The Asha East well was then suspended and plugged back in order to continue with Amol well. The remaining 12 1/4" and 8 1/2" sections of the Amol well was drilled from 4 to 25 September 2014, then plugged back to kick off the 16/1-20 A T3 Asha East well.

In the Cromer Knoll Group a sandy section with a log response unlike the Åsgard Formation was penetrated from 2427 m to 2753.5 m. Below this section the well penetrated Intra-Draupne Formation sandstone down to the target Hugin Formation sandstones at 2977 m. All sandstones were devoid of any hydrocarbons. Post well depth conversion showed the spill point to the east from the Asha/Ivar Aasen structure to be below the OWC. In addition, the Heather Formation shale acting as top seal in the Asha well was not present in the Asha East.

A total of 55 meter of 4" core was cut and 55 meter recovered over a single core run at 2967 to 3022 m. RCX fluid samples were taken at 2995.5 m. The maximum temperature from the RCX run was 99.9 °C at 3040.6 m, giving a temperature gradient of 4.2 °C/100 m.

Operations on Asha East ended with permanent abandonment on 22 October 2013. The well is classified as a dry 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]
610.00	2397.00

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	2966.8	3022.0	[m]

Total core sample length [m]	55.2
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
144	NORDLAND GP
144	UNDIFFERENTIATED
770	UTSIRA FM
812	HORDALAND GP
812	UNDIFFERENTIATED
911	SKADE FM
1772	GRID FM
1937	UNDIFFERENTIATED
2131	ROGALAND GP
2131	BALDER FM
2153	SELE FM
2193	LISTA FM
2382	SHETLAND GP
2382	EKOFISK FM
2427	CROMER KNOLL GP
2427	ÅSGARD FM
2754	VIKING GP
2754	INTRA DRAUPNE FM SS
2915	HEATHER FM
2977	VESTLAND GP
2977	HUGIN FM
3049	STATFJORD GP
3049	UNDIFFERENTIATED
3060	HEGRE GP
3060	SKAGERRAK FM

**Drilling mud**

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
952	1.34	29.0		Carbosea	
1444	1.39	27.0		Carbosea OBM	
2353	1.44	28.0		Carbosea	
2397	1.34	24.0		Carbosea	
2403	1.51	28.0		Carbosea	
2967	1.44	27.0		Carbosea	
3106	1.44	25.0		Carbosea	