

**General information**

Wellbore name	16/1-22 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	IVAR AASEN
Discovery	16/1-9 Ivar Aasen
Well name	16/1-22
Seismic location	DN14302-0313(N-S)DN14302-0113(W-E)
Production licence	001 B
Drilling operator	Det norske oljeselskap ASA
Drill permit	1583-L
Drilling facility	MAERSK INTERCEPTOR
Drilling days	8
Entered date	27.05.2015
Completed date	04.06.2015
Release date	04.06.2017
Publication date	04.06.2017
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	LATE TRIASSIC
1st level with HC, formation	SKAGERRAK FM
Kelly bushing elevation [m]	55.0
Water depth [m]	111.0
Total depth (MD) [m RKB]	2896.0
Final vertical depth (TVD) [m RKB]	2522.0
Maximum inclination [°]	46.7
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50
NS degrees	58° 54' 23.09" N
EW degrees	2° 9' 43.41" E
NS UTM [m]	6530083.86
EW UTM [m]	451726.15



UTM zone	31
NPDID wellbore	7716

Wellbore history

General

Well 16/1-22 A is a geological sidetrack to well 16/1-22 S on the Ivar Aasen Field on the Gudrun Terrace in the North Sea. The primary objective was to test the hydrocarbon potential in the Sleipner and Skagerrak Formations in the southwestern part of the Ivar Aasen Field, ca 950 m northeast of the main wellbore. 16/1-22 A also aimed to investigate a seismic anomaly at reservoir level.

Operations and results

Appraisal well 16/1-22 A was kicked off at 1465 m in the main wellbore on 27 May 2015. It was drilled with the jack-up installation Mærsk Interceptor to TD at 2896 m (2522 m TVD) m in the Triassic Skagerrak Formation. Static and dynamic mud losses occurred from 2794 m. The losses were cured by using coarse lost circulation material. The well was drilled with oil-based mud from kick-off to TD.

Top of the reservoir in the 16/1-22 A well was penetrated at 2769 m (2432.4 m TVD), 17 m shallower than expected, and with a reservoir thickness approximately half of what was predicted. No Jurassic reservoir was present, only Triassic. A total oil column of about 55 metres was encountered in the Skagerrak formation, 30 metres of which was in sandstone of varying reservoir quality, from moderate to very good. The oil/water contact was not encountered. The seismic anomaly is linked to the top of a total oil column of about 25 metres in an alluvial sandstone unit within the Skagerrak Formation, 15 metres of which had moderate reservoir properties. Hydrocarbon shows were recorded from top at 2769 m and throughout the Skagerrak Formation, with a weakening downward trend towards TD. A gas peak of up to 20% total gas indicated a gas cap in the uppermost part down to ca 2785 m. Shows were visible throughout the reservoir to TD,

No coring or wireline operations were performed in this sidetrack. No pressure points or fluid samples were acquired due to mud losses.

The well was permanently abandoned on 4 June 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]
1450.00	2896.00

Cuttings available for sampling?	YES
----------------------------------	-----

**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
166	NORDLAND GP
774	UTSIRA FM
842	HORDALAND GP
950	SKADE FM
1208	HORDALAND GP
1623	GRID FM
1835	HORDALAND GP
2211	ROGALAND GP
2211	BALDER FM
2264	SELE FM
2345	LISTA FM
2407	HEIMDAL FM
2485	LISTA FM
2529	VÅLE FM
2602	CROMER KNOLL GP
2602	ÅSGARD FM
2618	VIKING GP
2618	DRAUPNE FM
2740	HEATHER FM
2769	HEGRE GP
2769	SKAGERRAK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - GR RES DEN NEU APWD CAL IM	1420	2794
LWD - GR RES PWD DI	2794	2896

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	220.5	30	220.5	0.00	
SURF.COND.	20	354.0	26	359.0	0.00	
INTERM.	16	598.0	17 1/2	600.0	1.37	FIT



INTERM.	9 5/8	1448.5	12 1/4	1460.0	0.00	FIT
OPEN HOLE		2896.0	8 1/2	2896.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1400	1.35	32.0		Versatec OBM	
1800	1.34	31.0		Versatec OBM	
1940	1.34	32.0		Versatec OBM	
2540	1.34	28.0		Versatec OBM	
2896	1.34	28.0		Versatec OBM	