



General information





Wellbore name	16/3-U-1 B
Type	OTHER
Purpose	APPRAISAL
Status	P&A
Multilateral	NO
Main area	NORTH SEA
Field	JOHAN SVERDRUP
Discovery	16/2-6 Johan Sverdrup
Well name	16/3-U-1
Production licence	501
Drilling operator	Statoil Petroleum AS
Drill permit	781-G
Drilling facility	DEEPSEA ATLANTIC
Drilling days	7
Entered date	10.01.2017
Completed date	15.01.2017
Release date	15.01.2019
Plugged and abandon date	16.01.2017
Plugged date	15.01.2017
Publication date	15.01.2019
Purpose - planned	PILOT
Content	OIL
Discovery wellbore	NO
1st level with HC, age	LATE JURASSIC
1st level with HC, formation	INTRA DRAUPNE FM SS
Kelly bushing elevation [m]	30.0
Water depth [m]	118.0
Total depth (MD) [m RKB]	2665.0
Final vertical depth (TVD) [m RKB]	1963.0
Maximum inclination [°]	80.1
Oldest penetrated age	PRE-DEVONIAN
Oldest penetrated formation	BASEMENT
Geodetic datum	ED50
NS degrees	58° 46' 6.69" N
EW degrees	2° 47' 1.87" E
NS UTM [m]	6514447.47
EW UTM [m]	487497.99
UTM zone	31
NPDID wellbore	8104



Wellbore history

General

Well 16/3-U-1 B is a geological and geo-mechanical side-track to 16/3-U-1 on the south-eastern end of the Johan Sverdrup Field on the Utsira High in the North Sea. The reservoir in this part of the field is below seismic resolution. The primary objective of the primary well and side-tracks was to investigate sand presence, thickness and quality. Secondary, to investigate horizontal well drilling and high angle hole time-stability in the Draupne shales. As part of the secondary objective the first side-tracked bore hole 16/3-U-1 A should be left open for 48 hours and then re-entered. After an unsuccessful re-entry well bore 16/3-U-1 A was abandoned and side-track 16/3-U-1 B was initiated. Final TD in this side-track was set to a location between the primary wellbore and the first side-track in order to penetrate the field OWC.

Operations and results

Well 16/3-U-1 B was kicked off from 16/3-U-1 A below the 13 3/8" shoe at 2115 m on 10 January 2017. It was drilled with the semi-submersible installation Deepsea Atlantic, down-dip towards the south-east of the primary well bore to TD at 2665 m (1963 m TVD) in Basement rock. Operations proceeded without significant problems. The well was drilled with Carbosea oil-based mud from kick-off to TD.

Top Draupne Formation was penetrated at 2515 m (1937 m TVD), while the Intra Draupne Formation sandstone was encountered at 2598 m (1952 m TVD), and Basement at 2646 m (1960 m TVD). The Intra-Draupne sandstone was oil-filled down to the OWC at 2605.5 (1953 TVD).

In order to check for mechanical issues, a check trip through Draupne shale was successfully made 8-9 hours after drilling. Then a second check trip was made after 18 hours. The BHA was unable to get down with liner running parameters, and therefore drilling parameters were used and proved to be successful.

There are no oil show recordings from this well bore.

No cores were cut. No fluid sample was taken.

The well was permanently abandoned on 15 January 2017.

Testing

No drill stem test was performed.

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	36	197.6	42	205.0	0.00	
INTERM.	13 3/8	1119.4	17 1/2	1127.0	1.42	FIT
LINER	9 5/8	1989.0	12 1/4	1992.0	1.50	FIT
		2665.0	8 1/2	2665.0	0.00	

**Logs**

Log type	Log top depth [m]	Log bottom depth [m]
MWD - ASS ZTRAK COP ONT ORD	2115	2665

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
148	NORDLAND GP
773	UTSIRA FM
858	HORDALAND GP
858	SKADE FM
1307	ROGALAND GP
1307	BALDER FM
1345	SELE FM
1361	LISTA FM
1394	VÅLE FM
1433	SHETLAND GP
1433	EKOFISK FM
1454	TOR FM
1557	HOD FM
1786	BLODØKS FM
1901	SVARTE FM
1971	CROMER KNOLL GP
1971	RØDBY FM
2254	SOLA FM
2335	ÅSGARD FM
2515	VIKING GP
2515	DRAUPNE FM
2598	INTRA DRAUPNE FM SS
2646	BASEMENT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1739	1.33	27.0		CARBOSEA	
2665	1.33	27.0		CARBOSEA	

