General information

Wellbore name	32/4-2
Type	EXPLORATION
Purpose	WILDCAT
Status	JUNKED
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	32/4-2
Seismic location	CGG17M01. Inline 9685. Xline 22271
Production licence	921
Drilling operator	Equinor Energy AS
Drill permit	1784-L
Drilling facility	WEST HERCULES
Drilling days	13
Entered date	09.09.2019
Completed date	21.09.2019
Plugged date	21.09.2019
Release date	01.04.2020
Publication date	10.11.2021
Purpose - planned	WILDCAT
Reentry	NO
Content	NOT APPLICABLE
Discovery wellbore	NO
Kelly bushing elevation [m]	31.0
Water depth [m]	292.0
Total depth (MD) [m RKB]	1184.0
Final vertical depth (TVD) [m RKB]	1184.0
Geodetic datum	ED50
NS degrees	60° 30' 37.36'' N
EW degrees	4° 9' 18.03'' E
NS UTM [m]	6708967.50
EW UTM [m]	563429.77
UTM zone	31
NPDID wellbore	8874

Wellbore history

General

Well 32/4-2 was drilled to test the Gladsheim prospect on the Horda Platform in the Stord Basin Area. The prospect is located approximately 25 km east of Troll East and 30 km from shore. The primary objective was to prove oil migration into the Sognefjord Formation and establish the corresponding fluid contacts. Secondary objective was to test the gas potential in Mid- and Lower Jurassic Brent Group, Johansen Formation and Statfjord Group. A tertiary objective was to verify Late Jurassic shales sealing capacity and acquire data to confirm CO2 storage potential and to extend the well into the Lunde Formation for this reason

Operations and results

Wildcat well 32/4-2 was spudded with the semi-submersible installation West Hercules on 9 September 2019 and drilled vertically with two hole sections: 32”x42” and 17 ½”. These sections were drilled with seawater and returns to seabed. After running the 20 x 13 3/8” casing, gas bubbles were observed flowing from LPWHH circulation ports. The shallow hazard evaluation had given a shallow gas Class 0, so shallow gas was not expected at the well location. Neither was shallow water flow. Gas samples were taken. A 13 3/8" casing cement bond log and an acoustic log were performed on wireline from respectively 1130 m to seabed, and 767 m to 320 m. The BOP was run and pressure tested to 183 bar for 60 minutes against the 13 3/8" casing. Mud/water forming craters on the seabed was observed around the wellhead. The

decision was made to pull the BOP and the riser and to abort further operations on this well. TD was thus set at 1185 m in the Late Jurassic Draupne Formation.

Due to the unexpected shallow gas and water flow the well was terminated above the objective formations.

No cores were cut. Two gas samples were collected in small gas bottles using a ROV. The main compound in the gas was identified as methane with minor proportions of CO2, N2, H2O, and traces of ethane and helium. The isotope analyses confirmed the conclusion that the gas trickling from the sediments is of microbial (biogenic) origin.

The well was permanently abandoned on 23 September 2019 as a junk well. Replacement well 32/4-3 S was initiated.

Testing

No drill stem test was performed.

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
323	NORDLAND GP
323	UNDIFFERENTIATED
532	ROGALAND GP
532	BALDER FM
542	SHETLAND GP
542	HARDRÅDE FM
588	KYRRE FM

597	TRYGGVASON FM
702	SVARTE FM
735	CROMER KNOLL GP
735	UNDIFFERENTIATED
1083	VIKING GP
1083	DRAUPNE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
ACL	320	1140
IBC CBL GR	350	1130
MWD LWD - PD TELE ARC SS	376	1184
MWD LWD - TELE	223	376

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	373.0	42	377.0	0.00	
SURF.COND.	13 3/8	1178.0	17 1/2	1184.0	0.00	