General information

Wellbore name	34/7-E-4 AH
Type	EXPLORATION
Purpose	WILDCAT
Status	PLUGGED
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Field	VIGDIS
Discovery	34/7-E-4 AH (Lomre)
Well name	34/7-E-4
Seismic location	Inline: 3872. X-line: 6518. 3D survey: SG9701
Production licence	089
Drilling operator	Equinor Energy AS
Drill permit	1811-L
Drilling facility	TRANSOCEAN NORGE
Drilling days	36
Entered date	08.06.2020
Completed date	13.07.2020
Plugged date	13.07.2020
Release date	13.07.2022
Publication date	08.08.2022
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	RANNOCH FM
Kelly bushing elevation [m]	32.9
Water depth [m]	283.0
Total depth (MD) [m RKB]	4455.0
Final vertical depth (TVD) [m RKB]	2546.0
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	RANNOCH FM
Geodetic datum	ED50
NS degrees	61° 23' 54.99'' N
EW degrees	2° 4' 4.33'' E
NS UTM [m]	6807705.29

EW UTM [m]	450216.61
UTM zone	31
NPDID wellbore	9010

Wellbore history

General

Well 34/7-E-4 AH was drilled to test the Lomre prospect on Tampen Spur, north of the Vigdis Field and south-west of the Snorre Field. The primary objective was to prove the presence of oil in the Rannoch Formation (Brent Group).

Operations and results

Wildcat well 34/7-E-4 AH was drilled as a geological side-track from existing development well 34/7-E-4 H on the Vigdis field. The 34/7-E-4 AH side-track was kicked off at 1172 m with the semi-submersible installation Transocean Norge on 8 June 2020. This hole was drilled to 4436 m (2495.2 m TVD) where total losses occurred, which required cementing back the hole and kicking off a technical side-track 34/7-E-4 AH T2 from 3783 m. This hole was drilled to final TD at 4448 m (2541.2 m TVD) in the Middle Jurassic Rannoch Formation. The well was drilled with Versatech oil-based mud from kick-off to TD.

Indications from gas logging and resistivity measurements suggest water filled sands in Lista Formation at the well location. The well penetrated top reservoir in the Rannoch Formation, at 4366 m (2490.1 m TVD). The well continued through the Rannoch Formation and TD was set in the shale-dominated lower Rannoch Formation. The Rannoch Formation contained both an oil and a water leg. Pressure points suggest a reservoir pressure depleted relative to initial pressures seen in the Vigdis field. No oil shows are described in the well.

No cores were cut. No fluid sample was taken.

The well was permanently abandoned on 12 July 2020 as an oil discovery.

Testing

No drill stem test was performed.

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
1136	HORDALAND GP
1136	UNDIFFERENTIATED
1913	ROGALAND GP
1913	BALDER FM
1997	LISTA FM
2234	SHETLAND GP
2234	UNDIFFERENTIATED

4345	CROMER KNOLL GP
4345	RØDBY FM
4355	MIME FM
4366	BRENT GP
4366	RANNOCH FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - GR RES	1172	2355
MWD - GR RES	2354	3849
MWD - GR RES DEN NEU FPWD	3849	4436

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
SURF.COND.	13 3/8	2344.9	16	2433.0	1.77	FIT
LINER	9 5/8	3777.0	12 1/4	3849.0	1.72	FIT
OPEN HOLE		4436.0	8 1/2	4436.0	0.00	