

**General information**

Wellbore name	6611/1-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Discovery	6611/1-1 (Toutatis)
Well name	6611/1-1
Seismic location	DEA18300-01022; DEA18300-03033
Production licence	896
Drilling operator	DEA Norge AS
Drill permit	1786-L
Drilling facility	WEST HERCULES
Drilling days	23
Entered date	02.11.2019
Completed date	24.11.2019
Plugged and abandon date	24.11.2019
Release date	24.11.2021
Publication date	22.12.2021
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	EARLY JURASSIC
Kelly bushing elevation [m]	31.0
Water depth [m]	357.0
Total depth (MD) [m RKB]	1905.0
Final vertical depth (TVD) [m RKB]	1905.0
Oldest penetrated age	TRIASSIC
Geodetic datum	ED50
NS degrees	66° 47' 39.64" N
EW degrees	11° 1' 11.61" E
NS UTM [m]	7410082.99
EW UTM [m]	588807.46
UTM zone	32
NPDID wellbore	8887



Wellbore history

General

Well 6611/1-1 was drilled to test the Toutatis prospect on the Grønøy High in the Norwegian Sea. The primary objective was to test the hydrocarbon potential in the Tilje and Åre formations.

Operations and results

Operations started on 31 October 2019 with drilling of a 9 7/8" shallow gas pilot hole 6611/1-U-1 from seabed down to 875 m. The pilot hole was drilled 50 m north-north-east of the main well spud location. No shallow gas was observed. Wildcat well 6611/1-1 was spudded with the semi-submersible installation West Hercules on 2 November 2019 and drilled to TD at 1905 m in the Grey Beds/Red Beds of Early Triassic (Griesbachian) age. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 824 m and with Glydril mud from 824 m to TD.

The well penetrated a hiatus from base Springer Formation to top Tilje Formation at 1257.5 m. The Tilje Formation contained a ca 10 m oil column with a free water level at 1270.8 m. Geochemical analyses of the oil proved a biodegraded oil devoid of n-alkanes, but sampling and PVT analyses proved the oil to be mobile with a stock tank density of 0.89 g/cm³ and bubble point viscosity of 4.3 mPa·s. Elevated gas readings and weak oil shows described as "spotty dull gold yellow direct fluorescence, with a poor slow, even dull blueish white cut fluorescence" was observed down to 1295 m. Below this depth some minor gas peaks were observed in the Åre Formation and the Grey Beds/Red Beds.

No conventional core was cut. MDT fluid samples were taken at 1257.9 m (oil), 1263.4 m (oil with trace water), 1267.7 m (water with trace oil), and 1362.3 m (water).

The well was permanently abandoned on 24 November 2019 as an oil discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
830.00	1905.00

Cuttings available for sampling?	YES
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Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
387	NORDLAND GP
387	UNDIFFERENTIATED



478	HORDALAND GP
478	BRYGGE FM
836	ROGALAND GP
836	TARE FM
1044	TANG FM
1196	SHETLAND GP
1196	SPRINGAR FM
1258	BÅT GP
1258	TILJE FM
1387	ÅRE FM
1584	GREY BEDS (INFORMAL)

Logs

Log type	Log top depth [m]	Log bottom depth [m]
FMI PPC MSIP	1240	1900
HRLA PEX HMGS	1244	1900
MDT LS	1244	1900
MSCT	1258	1874
MWD - GR DI APWD	386	824
MWD - GRAB APWD RES DI SON CAL D	824	1244
MWD - GRAB RES APWD DI CAL DEN N	1244	1905
USIT CBL	0	0
VSP VSI4	386	1895
XPT NMR	1244	1900

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	399.0	36	399.0	0.00	
SURF.COND.	13 3/8	820.0	17 1/2	824.0	1.43	FIT
LINER	9 5/8	1244.0	12 1/4	1245.0	1.49	FIT
OPEN HOLE		1905.0	8 1/2	1905.0	0.00	