

**General information**

Wellbore name	6306/3-1 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6306/3-1
Seismic location	Inline: INE20300-04008. Crossline: INE20300-02012
Production licence	937
Drilling operator	PGNiG Upstream Norway AS
Drill permit	1870-L
Drilling facility	BORGLAND DOLPHIN
Drilling days	73
Entered date	30.09.2021
Completed date	11.12.2021
Plugged and abandon date	11.12.2021
Release date	21.04.2022
Publication date	21.04.2022
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	31.0
Water depth [m]	241.0
Total depth (MD) [m RKB]	2384.0
Final vertical depth (TVD) [m RKB]	2384.0
Maximum inclination [°]	4.2
Oldest penetrated formation	BASEMENT
Geodetic datum	ED50
NS degrees	63° 53' 8.79" N
EW degrees	6° 46' 9.65" E
NS UTM [m]	7086375.44
EW UTM [m]	390460.14
UTM zone	32
NPDID wellbore	9401



Wellbore history

General

Well 6306/3-1 S was drilled to evaluate the Fat Canyon prospect on the Fr ya High south of the Fenja Field in the Norwegian Sea. The primary objective was to prove and evaluate the potential Early Cretaceous to Late Jurassic sandstone reservoir of the Fat Canyon prospect and to test if the reservoir contained economically recoverable hydrocarbons.

Operations and results

Wildcat well 6306/3-1 S was spudded with the semi-submersible installation Borgland Dolphin on 30 September 2021. After drilling the top 36" hole to 338 m a 9 7/8" pilot was drilled to 976 m. The pilot encountered shallow gas at 468 m and 793 m. The upper zone was killed dynamically and drained controllably. The lower zone was plugged back with cement and the pilot was opened to 26" down to 657. The 20" casing was set at 650 and drilling commenced with a 17 1/2" section and 12 1/4" section to 2365 m. Here, the 9 5/8" casing stuck before reaching the planned setting and this led to several days NPT and in the end a technical sidetrack (6306/3-1 ST2) was made with kick-off at 1076 m. This bore holed was drilled to final TD at 2384 m (2384 m TVD) in Basement rocks. The well was drilled with seawater and hi-vis pills down to 657 m, with Glydril Plus from 657 to 2100 m and with Versatec oil-based mud from 2100 m to TD.

The target Rogn Formation reservoir was penetrated from 2318 to 2345 m and consisted of very well cemented calcareous Sandstones and sandy Limestones. The potential Early Cretaceous Lyr Formation reservoir was not present and only Claystone lithologies were encountered. There were no hydrocarbon indicators observed whilst drilling.

Due to dry well no cores were cut, no logs were run on wire line and no wire line fluid sample was taken.

The well was permanently abandoned on 10 December 2021 as a dry well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
660.00	2363.00

Cuttings available for sampling?	YES
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Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
272	NORDLAND GP



272	NAUST FM
991	KAI FM
1001	HORDALAND GP
1001	BRYGGE FM
1358	ROGALAND GP
1358	TARE FM
1500	TANG FM
1665	SHETLAND GP
1665	SPRINGAR FM
1766	NISE FM
1936	KVITNOS FM
2208	CROMER KNOLL GP
2208	LANGE FM
2313	LYR FM
2318	VIKING GP
2318	ROGN FM
2345	BASEMENT

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - DI	272	336
LWD - DI PWD RES GR SM CAL DEN N	1048	2365
LWD - ECD GR RES DI	338	657
LWD - GR ECD DEN NEU RES DI SON	338	972
LWD - GR ECD DI	338	976
LWD - PRES RES GR DI	657	1048
T2 LWD - DI RES GR SON PWD	1076	2104
T2 LWD - RES GR PWD DEN CAL NEU-	2104	2384
T2 LWD - SPEC DI PRO SON	2104	2384

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	337.8	36	338.2	0.00	
INTERM.	20	651.5	26	657.0	1.47	FIT



INTERM.	13 3/8	1041.0	17 1/2	1048.0	1.71	FIT
INTERM.	9 5/8	2091.2	12 1/4	2100.0	1.86	LOT
		2365.0	12 1/4	2365.0	0.00	
OPEN HOLE		2383.8	8 1/2	2383.8	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
140	1.46	26.0	25.0	GlyDril Plus	
327	1.49	1.0	1.0	Spud mud	
418	1.29	16.0	7.0	GlyDrill Plus	
510	1.47	22.0	40.0	Glydril Plus	
657	1.24	9.0	34.0	Glydril Plus	
692	1.49	1.0	1.0	Kill mud	
720	1.49	1.0	1.0	Spud mud	
723	1.37	9.0	34.0	Spud mud	
775	1.24	21.0	16.0	GlyDril Plus	
802	1.27	18.0	9.0	GlyDrill Pluss	
965	1.25	23.0	15.0	Glydril Plus	
976	1.49	1.0	1.0	Kill mud	
1015	1.25	21.0	14.0	GlyDril Plus	
1041	1.46	23.0	11.0	Glydril Plus	
1048	1.30	22.0	15.0	GlyDril Plus	
1080	1.46	23.0	14.0	Glydril Plus	
2130	1.46	22.0	16.0	GlyDril Plus	
2140	1.30	22.0	11.0	Versatec OBM	
2142	1.46	21.0	13.0	GlyDril Plus	
2243	1.29	28.0	14.0	OBM Versatec	
2278	1.46	25.0	16.0	GlyDril Plus	
2300	1.29	29.0	14.0	Versatec OBM	
2335	1.46	24.0	14.0	GlyDril Plus	
2384	1.29	28.0	7.0	Versatec OBM	