

**General information**

Wellbore name	25/8-17
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Field	JETTE
Discovery	25/8-17 Jette
Well name	25/8-17
Seismic location	xline 4558 inline 1341 NO07M01
Production licence	027 D
Drilling operator	ExxonMobil Exploration and Production Norway AS
Drill permit	1266-L
Drilling facility	BREDFORD DOLPHIN
Drilling days	21
Entered date	09.10.2009
Completed date	29.10.2009
Release date	29.10.2011
Publication date	29.10.2011
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	PALEOCENE
1st level with HC, formation	HEIMDAL FM
Kelly bushing elevation [m]	25.0
Water depth [m]	127.0
Total depth (MD) [m RKB]	2233.0
Final vertical depth (TVD) [m RKB]	2233.0
Maximum inclination [°]	1.5
Bottom hole temperature [°C]	86
Oldest penetrated age	PALEOCENE
Oldest penetrated formation	TY FM
Geodetic datum	ED50
NS degrees	59° 23' 32.14" N
EW degrees	2° 20' 2.2" E



NS UTM [m]	6584073.73
EW UTM [m]	462168.23
UTM zone	31
NPDID wellbore	6185

Wellbore history

General

Well 25/8-17 was drilled on the Jetta prospect on Heimdal Terrace, south of the Jotun Field in the North Sea. The objective was to test the hydrocarbon and reservoir potential of the Paleocene Heimdal Formation. It was planned as a vertical well. A side track was planned in case of a discovery.

Operations and results

Wildcat well 25/8-17 was spudded with the semi-submersible installation Bredford Dolphin on 9 October 2009 and drilled to TD at 2233 m in the Late Paleocene Ty Formation. Pilot holes were drilled from surface and after setting the 30" conductor to check for shallow gas. At 244 meters small amounts of bubbles were detected with the ROV, but when taking a flow check no more bubbles were seen. No significant technical problem occurred in the operations. The well was drilled with bentonite and seawater with hi-vis sweeps down to 222 m, with seawater and BARAZAN sweeps from 222 m to 1086 m, and with Performadril mud with 4.5 - 5 % glycol from 1086 m to TD.

The target Heimdal Formation was penetrated at 2077 m and the upper sands were found hydrocarbon bearing. Analysis of logs, formation pressures and fluid samples gave a most likely oil water contact (OWC) at 2111 m (2086 m TVD MSL). However, pressure gradients indicated OWC at 2116 m, while shows on sandstones were recorded down to 2115 m. The oil bearing sands were between 3 and 1 m thick, but with excellent reservoir properties with average porosity of 24%. The average oil saturation in the upper two oil sands is 77 % and 50 % respectively. A massive, water bearing sandstone is present roughly in the middle part of Heimdal, with the same reservoir properties as the thinner oil bearing sands above.

No cores were cut. MDT wire line samples were taken at 2094 m (oil), 2110.5 m (oil with some water), and at 2120.8 m (water).

It was decided to drill a geological side track (25/8-17 A) towards the north-east, in an attempt to find thicker Heimdal sands. The well was plugged back and sidetracked on 29 October 2009. It is classified 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]
1090.00	2232.00

Cuttings available for sampling?	YES
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**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
152	NORDLAND GP
453	UTSIRA FM
1013	HORDALAND GP
1165	SKADE FM
1199	NO FORMAL NAME
1224	GRID FM
1322	NO FORMAL NAME
1918	ROGALAND GP
1918	BALDER FM
1997	SELE FM
2033	LISTA FM
2077	HEIMDAL FM
2207	TY FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR PEX HRLA	1080	2202
LWD - EWR GR PWD DIR	152	222
LWD - EWR GR PWD DIR	222	1086
LWD - EWR GR PWD DIR CTN DEN SON	1086	2233
MDT	2080	2170
VSI-4	152	2208

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	218.0	36	217.6	0.00	LOT
SURF.COND.	13 3/8	1080.0	17 1/2	1086.0	0.00	LOT
OPEN HOLE		2233.0	12 1/4	2233.0	0.00	LOT

Drilling mud



Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1086	1.35	31.0		PERFORMADRIL	
1090	1.34	17.0		XP-07 Yellow	
1347	1.35	34.0		PERFORMADRIL	
1516	1.35	41.0		PERFORMADRIL	
1758	1.35	50.0		PERFORMADRIL	
2098	1.35	48.0		PERFORMADRIL	
2233	1.35	44.0		PERFORMADRIL	

Pressure plots

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

Document name	Document format	Document size [MB]
6185_Formalion_pressure_(Formasjonstrykk)	pdf	0.22

