General information

Wellbore name	25/8-16 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	25/8-16 S (Eitri)
Well name	25/8-16
Seismic location	ES9403.inline 1433 & xline2484
Production licence	027 D
Drilling operator	ExxonMobil Exploration and Production Norway AS
Drill permit	1237-L
Drilling facility	BREDFORD DOLPHIN
Drilling days	34
Entered date	10.04.2009
Completed date	13.05.2009
Release date	13.05.2011
Publication date	13.05.2011
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]	126.0
Total depth (MD) [m RKB]	2550.0
Final vertical depth (TVD) [m RKB]	2132.0
Maximum inclination [°]	61.5
Bottom hole temperature [°C]	84
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	STATFJORD GP
Geodetic datum	ED50
NS degrees	59° 24' 56.25'' N
EW degrees	2° 29' 2.34'' E
NS UTM [m]	6586599.87

EW UTM [m]	470710.44
UTM zone	31
NPDID wellbore	6082

Wellbore history

General

Well 25/8-16 S is located on the Utsira High in the southern part of the Viking Graben in the North Sea. It was drilled to test the hydrocarbon and reservoir potential in two prospects. The man target was the Eitri prospect in the paleocene Ty Formation, and the second target was the Phi prospect in the Statfjord Formation. Depending on findings in the Ty and Statfjord reservoir sections, it was an option to drill one or two sidetracks. For dry hole cases in Ty and Statfjord reservoir sections, no sidetracks should be drilled.

Operations and results

Wildcat well 25/8-16 S was spudded with the semi-submersible installation Bredford Dolphin on 10 April 2009 and drilled to TD at 2550 m (2132 m TVD) in the Early Jurassic Statfjord Formation . The well was drilled vertical down to 1100 m, and then deviated towards the south. The well was drilled with Seawater/spud mud down to 1935 m and with XP-07 oil based mud from 1035 m to TD.

A 3 m thick oil column was discovered in the Heimdal Formation, in the 12 1/4" section. The oil - water contact was not found. The Heimdal Formation was not one of the targets for the well, and was not prognosed as it was believed to pinch out down flanks of the well. No signs of hydrocarbons were found in the main target Ty Formation, or in the secondary target of Statfjord Formation. No oil shows above the oil based mud were recorded in the well.

No cores were cut in the well. MDT fluid samples were taken with dual packer through perforation in casing at 2232.65 m (1972.65 m TVD) in the Heimdal Formation. When the MDT run was performed, the Heimdal Formation had been behind casing for 8 days, and there had been no circulation for about 100 hours. After 48 hours and pumping of 1769 litres the measured temperature was 79.5 deg C. This temperature is regarded as highly representative for the formation. The samples consisted of oil with a GOR ranging from 136.3 to 149.6 Sm3/Sm3.

Based on the findings in 25/8-16 S, it was decided to drill a side track (25/8-16A) to appraise the discovery made in the Heimdal Formation.

The well bore was permanently abandoned on 13 May 2009 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]
1040.00	2550.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
151	NORDLAND GP
519	UTSIRA FM
1005	HORDALAND GP
1156	SKADE FM
1224	GRID FM
1973	ROGALAND GP
1973	BALDER FM
2059	SELE FM
2146	LISTA FM
2200	HEIMDAL FM
2359	TY FM
2395	SHETLAND GP
2395	EKOFISK FM
2400	DUNLIN GP
2400	AMUNDSEN FM
2495	STATFJORD GP

Logs

Log type	Log top depth [m]	Log bottom depth [m]
GR CCL PERF	2232	2232
IBC CBL GR CCL	1900	2290
MDT DP	2232	2232
MWD LWD - DIR	151	220
MWD LWD - DIR DGR EWR PWD	220	1036
MWD LWD - DIR DGR EWR PWD	1036	2550
MWD LWD - DIR DGR PWD	220	1036

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	216.0	36	216.0	0.00	LOT

SURF.COND.	13 3/8	1030.0	17 1/2	1039.0	1.82	LOT
INTERM.	9 5/8	2353.0	12 1/4	2370.0	1.57	LOT
OPEN HOLE		2550.0	8 1/2	2550.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
179	1.06			Spud Mud	
958	1.06			Spud Mud	
1021	1.47	21.0		XP-07	
1035	1.25	18.0		Spud Mud	
1159	1.50	21.0		XP-07	
2346	1.50	21.0		XP-07	
2370	1.50	20.0		XP-07	
2551	1.39	20.0		XP-07	