General information

Wellbore name	2/11-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	HOD
Discovery	2/11-10 S
Well name	2/11-3
Seismic location	ANO 75-12 .SP 160
Production licence	033
Drilling operator	Amoco Norway Oil Company
Drill permit	184-L
Drilling facility	DYVI BETA
Drilling days	55
Entered date	10.10.1977
Completed date	03.12.1977
Release date	03.12.1979
Publication date	22.03.2013
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	36.0
Water depth [m]	72.0
Total depth (MD) [m RKB]	3052.0
Bottom hole temperature [°C]	89
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	RØDBY FM
Geodetic datum	ED50
NS degrees	56° 10' 53.74'' N
EW degrees	3° 27' 51.78'' E
NS UTM [m]	6226525.75
EW UTM [m]	528827.92
UTM zone	31
NPDID wellbore	286

Wellbore history

General

Well 2/11-3 is located 2.5 km due east from 2/11-2 and 6.5 km south-southeast from the Valhall well 2/11-1. The primary objective of well 2/11-3 was the Late Cretaceous chalk section on the western flank of the East Lobe of the Hod structure. The West Lobe was found to be oil bearing by 2/11-2 in 1974. Seismic indicated an expansion of the chalk section compared to 2/11-2 and that the graben feature found on Valhall extended south-eastward over the East Hod and therefore the possibility for the high reservoir quality Maestrichtian rock to be present in this area.

Operations and results

Well 2/11-3 was spudded with the jacket 4 legs installation Dyvi Beta on 10 October 1977 and drilled to TD at 3052 m in the Early Cretaceous Rødby Formation. The well was drilled in a total of 47 days without any major drilling problems. However, 3 days were spent waiting for the correct Cameron BOP Adaptor Spool.

Well 2/11-3 proved the Hod complex to consist of two individual structures. A domal West Hod structure has a seismically defined closure area of 7.5 square km. East Hod, where 2/11-3 was located, is a northwest-southeast trending anticline covering approximately 6 square km.

The well penetrated a normal sequence of Quarternary-Tertiary section from the surface to the top of the Late Cretaceous at 2774.5 m. This interval typically consists of predominantly clay and shale with thin stringers of limestone and dolomite scattered throughout. The basal Tertiary unit is marked by the occurrence of the Paleocene Ash marker that displays the characteristic metallic blue grey-violet colour of the volcanic tuff. This correlative unit was encountered at 2714.5 m and is 18 meters thick. The chalk section was found to be 247 meters thick compared to 112 meters in 2/11-2 and 258 meters in 2/11-1. There were no hydrocarbon-bearing formations in the well. The top three meters of the chalk section showed patchy, orange yellow fluorescence. Further below only traces of orange yellow, residual oil fluorescence were occasionally seen, normally associated with an increase in total gas readings. Otherwise no oil shows were recorded in the well.

Three conventional cores were cut at the top chalk section, from 2776.5 m to 2811.0 m. No wire line fluid samples were taken.

The well was permanently abandoned on 3 December 1977 as a dry well with shows.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
150.00	3051.60

Cuttings available for sampling?	YES

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2776.0	2792.0	[m]
2	2789.0	2789.5	[m]
3	2792.0	2811.0	[m]

Total core sample length [m]	35.5
Cores available for sampling?	YES

Core photos


2776-2779m


2779-2782m


2785-2788m


2788-2791m


2789-2789m


2791-2792m


2792-2795m


2795-2798m


2798-2801m


2801-2804m


2804-2807m


2807-2810m


2810-2811m

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
108	NORDLAND GP
1515	HORDALAND GP
2714	ROGALAND GP
2714	BALDER FM
2727	SELE FM
2747	LISTA FM
2775	SHETLAND GP
2775	HOD FM
3022	CROMER KNOLL GP
3022	RØDBY FM

Documents - reported by the production licence (period for duty of secrecy expired)

Document name	Document format	Document size [MB]
286_2_11_3_Completionlog	pdf	2.61
286_2_11_3_Final_well_report	pdf	46.03

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL CCL	185	1258
CBL VDL CCL TT	1573	2715
CBL VDL TT	185	1215
CONT-DIP	1286	2749
CONT-DIP	2737	3049
DLL MSFL SP GR CAL	2737	3048
FDC CNL GR CAL	2737	3048
ISF SON SP GR	169	409
ISF SON SP GR	406	1278
ISF SON SP GR CAL	1286	2749
ISF SON SP GR CAL	2737	3048
TEMP	1	2197
VELOCITY	145	3010

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	170.0	36	170.0	0.00	LOT
SURF.COND.	20	408.0	26	412.0	0.00	LOT
INTERM.	13 3/8	1286.0	17 1/2	1287.0	0.00	LOT
INTERM.	9 5/8	2740.0	12 1/4	2749.0	0.00	LOT
OPEN HOLE		3052.0	8 1/2	3052.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
325	1.07			waterbased	
1021	1.25			waterbased	
1287	1.30			waterbased	
1715	1.79			waterbased	
2525	1.79			waterbased	
3051	1.79			waterbased	