

**General information**

Wellbore name	2/11-5
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	HOD
Discovery	2/11-2 Hod
Well name	2/11-5
Seismic location	
Production licence	033
Drilling operator	Amoco Norway Oil Company
Drill permit	214-L
Drilling facility	DYVI ALPHA
Drilling days	49
Entered date	18.05.1979
Completed date	05.07.1979
Release date	05.07.1981
Publication date	22.03.2013
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	72.0
Total depth (MD) [m RKB]	2945.0
Final vertical depth (TVD) [m RKB]	2944.0
Maximum inclination [°]	4.4
Bottom hole temperature [°C]	106
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	RØDBY FM
Geodetic datum	ED50
NS degrees	56° 9' 57.7" N
EW degrees	3° 26' 6.42" E
NS UTM [m]	6224781.27
EW UTM [m]	527022.05
UTM zone	31
NPDID wellbore	288



Wellbore history

**General**

Well 2/11-5 was drilled on the western lobe of the Hod Field to test the Late Cretaceous Chalk section. The well was located 1.8 km SSE of 2/11-2 which tested oil from a very thin Chalk section of the Lower Hod Formation. Structural interpretations were made showing a NW-SE trending graben traversing the West Hod lobe. Based on a model from East Hod, it was expected that the porous Tor Formation should be preserved below the unconformity within this structure.

Operations and results

Well 2/11-5 was spudded with the semi-submersible installation Dyvi Alpha on 18 May 1979 and drilled to TD at 2945 m in the Early Cretaceous Rødby Formation. No significant problem was encountered in the operations, however six days were spent repairing the BOP stack before it could be run and two days were spent while mixing oil-based mud. The well was drilled with seawater, bentonite and CMC EHV down to 1285 m, with gyp/CMC mud from 1285 m to 2320 m, with lignosulphonate mud from 2320 m to 2765 m, and with oil based "Oilfaze" mud from 2765 m to TD.

The Paleocene Ash Marker (Balder Formation) was encountered at 2715 m; 105 m low to prognosis. The top of the Chalk Group, Ekofisk Formation was encountered at 2822 m; 117 m low to prognosis. In total, the Chalk section was found to be 98 m thick, whereas 300 m was predicted. These discrepancies reflect the effects of the shallow gas in the area on the seismic data. The velocity corrections which were applied to the seismic were too large. As a consequence, the Chalk Group within the Graben was found below the oil-water contact of the area and no moveable hydrocarbons were encountered. Frequent oil shows were reported however, starting in the upper part of the Hordaland Group:

1470 - 1575 m: Appr.100% dull yellow fluorescence w/slow white streaming cut, strong odour.

1575 - 1760 m: 20-100% dull yellow fluorescence w/slow white streaming cut, large pieces bleeding gas.

1760 - 2050 m: 5-20% dull yellow fluorescence w/slow white streaming cut.

2050 - 2715 m: 100% dull to golden yellow fair to good fluorescence; moderate to fast streaming white cut; fair to good oil stain.

2715 - 2737 m: 20-50%, fair dull golden fluorescence and fair cut.

2825 - 2900 m: 20-80%, dull yellow/ orange fluorescence. No to fair cut.

No conventional cores were cut in well 2/11-5. Out of 25 sidewall cores 17 were recovered in the Late Cretaceous chalk. No wire line fluid samples were taken.

The well was permanently abandoned on 5 July 1979 as a 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]
165.00	2867.50

Cuttings available for sampling?	YES
----------------------------------	-----

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
94	NORDLAND GP
1475	HORDALAND GP
2715	ROGALAND GP
2715	BALDER FM
2737	SELE FM
2822	SHETLAND GP
2822	EKOFISK FM
2835	TOR FM
2855	HOD FM
2920	CROMER KNOLL GP
2920	RØDBY FM

Documents - older Norwegian Offshore Directorate WDSS reports and other related documents

Document name	Document format	Document size [MB]
288_01_WDSS_General_Information	pdf	0.10
288_02_WDSS_completion_log	pdf	0.20

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

Document name	Document format	Document size [MB]
288_2_11_5_Completionlog	pdf	1.95
288_2_11_5_Completion_report	pdf	14.15
288_2_11_5_Geological_summary	pdf	0.73

Logs





Log type	Log top depth [m]	Log bottom depth [m]
BHC AL IEL GR SP	168	356
BHC AL IEL GR SP	295	766
BHC AL IEL GR SP	1274	2777
BHC AL IEL GR SP	2690	2943
CBL VDL GR CCL	1	1250
CBL VDL GR CCL	2000	2723
CDL CDN GR CAL	0	0
DIP	1277	2645
DIP	2765	2943
VELOCITY	146	2901

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	172.0	0.00	LOT
SURF.COND.	20	351.0	26	358.0	1.48	LOT
INTERM.	13 3/8	1278.0	17 1/2	1278.0	1.92	LOT
INTERM.	9 5/8	2768.0	12 1/4	2781.0	1.84	LOT
OPEN HOLE		2945.0	8 1/2	2945.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
358	1.04	35.0		waterbased	
1170	1.07	30.0		waterbased	
1683	1.59	38.0		waterbased	
1980	1.72	75.0		waterbased	
2387	1.75	95.0		waterbased	
2707	1.80	52.0		waterbased	
2781	1.74	56.0		waterbased	