



General information

Wellbore name	2/11-2
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	HOD
Discovery	2/11-2 Hod
Well name	2/11-2
Seismic location	LINE 73-21 SP.31
Production licence	033
Drilling operator	Amoco Norway Oil Company
Drill permit	120-L
Drilling facility	ZAPATA EXPLORER
Drilling days	54
Entered date	06.11.1974
Completed date	29.12.1974
Release date	29.12.1976
Publication date	22.03.2013
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	LATE CRETACEOUS
1st level with HC, formation	HOD FM
Kelly bushing elevation [m]	36.0
Water depth [m]	66.0
Total depth (MD) [m RKB]	2806.0
Bottom hole temperature [°C]	67
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	RØDBY FM
Geodetic datum	ED50
NS degrees	56° 10' 51.2" N
EW degrees	3° 25' 25.9" E
NS UTM [m]	6226431.02
EW UTM [m]	526312.89
UTM zone	31
NPDID wellbore	285



Wellbore history

General

Well 2/11-2 was drilled on the Hod prospect on the Skrubbe Fault between the Lindesnes Ridge and the Ål Basin in the southern North Sea. The "Hod" anticline is a satellite or subsidiary feature immediately to the southwest of the large Valhall structure. The primary objective was the Danian/Late Cretaceous chalk section, the productive horizon in surrounding fields. Paleocene sand/siltstones would be secondary objectives, if encountered. These had shows in well 2/11-1, located 6.4 km north.

Operations and results

Wildcat well 2/11-2 was spudded with the semi-submersible installation Zapata Explorer on 6 November 1974 and drilled to TD at 2806 m in the Early Cretaceous Rødby Formation. It was drilled in 37 days without major problems, although 10 days were lost due to waiting on water, combating lost circulation after an attempt to kill a gas kick, and waiting on a new BOP stack after a leak was found on the old equipment. The well was drilled with seawater and Milben saltgel mud down to 145 m, with seawater, pre-hydrated Milben, Flosal mud from 145 m to 383 m, with Drispac/Flosal mud from 385 m to 1295 m, with Shale Trol until gumbo, converting to a Unical/seawater mud from 1295 m to 2660 m, and with a Unical/seawater mud from 2660 m to TD.

High gas readings were recorded from approximately 1415 m to 1675 m. Oil shows (dull yellow fluorescence and poor - fair cut) and free oil in the mud was also noted during the drilling of the above interval. Oil bearing Santonian - Coniacian chalk (Hod Formation) was encountered at 2640.5. The section had 51.5 m net pay with estimated average porosity of 27.7 percent and an average water saturation of 40.3 percent.

A core was taken from 2660.9 m to 2670.4 m, with 100% recovery. No fluid sample was taken on wire line.

The well was permanently abandoned on 29 December 1974 as an oil discovery.

Testing

Three Drill Stem Tests were performed in the well.

DST 1 tested the interval 2672.2 m to 2679.8 m in Turonian-Santonian chalk (Hod Formation). The test gave a weak flow, too weak to measure flow rates, but a small amount of 35 deg API oil was produced.

DST 2 tested the interval 2642.6 m to 2665.5 m in Turonian-Santonian chalk (Hod Formation). The interval was stimulated with acid before testing. On a restricted flow, the well tested 463 Sm³/day with a well head pressure of 160.3 bar. No water was produced. The GOR was 194 Sm³/Sm³ and the oil gravity was 36 deg API. Maximum flow was 546 Sm³ oil and 82120 Sm³ gas /day

DST 3 tested the interval 1499.6 m to 1503.3 plus 1512.4 m to 1517.3 m plus 1521 m to 1523.4 m in Oligocene silty shales of the Hordaland Group. After acid stimulation the test flowed very weak during all three flow periods. Some oil was produced towards the end of the last flow period.



Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
143.26	2806.29

Cuttings available for sampling?	YES
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Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	8731.0	8740.0	[ft]
2	8740.0	8749.0	[ft]
3	8749.0	8758.0	[ft]
4	8758.0	8761.0	[ft]

Total core sample length [m]	9.1
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
6550.0	[ft]	DC	HRS
6610.0	[ft]	DC	HRS
6670.0	[ft]	DC	HRS
6730.0	[ft]	DC	HRS
6790.0	[ft]	DC	HRS
6930.0	[ft]	DC	HRS
7050.0	[ft]	DC	HRS
7170.0	[ft]	DC	HRS
7290.0	[ft]	DC	HRS
7410.0	[ft]	DC	HRS
7530.0	[ft]	DC	HRS
7650.0	[ft]	DC	HRS
7770.0	[ft]	DC	HRS
7870.0	[ft]	DC	HRS
7990.0	[ft]	DC	HRS
8110.0	[ft]	DC	HRS
8230.0	[ft]	DC	HRS
8350.0	[ft]	DC	HRS



8390.0	[ft]	DC	HRS
8430.0	[ft]	DC	HRS
8470.0	[ft]	DC	HRS
8510.0	[ft]	DC	HRS
8530.0	[ft]	DC	HRS
8550.0	[ft]	DC	HRS
8570.0	[ft]	DC	HRS
8600.0	[ft]	DC	HRS
8620.0	[ft]	DC	HRS
8640.0	[ft]	DC	HRS
8660.0	[ft]	DC	HRS
8680.0	[ft]	DC	HRS

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
102	NORDLAND GP
1457	HORDALAND GP
2568	ROGALAND GP
2568	BALDER FM
2573	SELE FM
2597	LISTA FM
2640	SHETLAND GP
2640	HOD FM
2752	CROMER KNOLL GP
2752	RØDBY FM

Geochemical information

Document name	Document format	Document size [MB]
285_1	pdf	0.82
285_2	pdf	2.54

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

Document name	Document format	Document size [MB]
285_01_WDSS_General_Information	pdf	0.26



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

Document name	Document format	Document size [MB]
285 2 11 2 Completionlog	pdf	2.34
285 2 11 2 Final well report	pdf	12.14

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	2672	2680	0.0
2.0	2643	2665	0.0

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0				
2.0				

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0					
2.0	545	82120	0.830		194

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL CCL GR	609	2634
CBL CCL GR	2546	2693
CNL FDC GR	1432	2659
CNL FDC GR CAL	2634	2806
CNL GR	91	1280
DL MSFL	2512	2809
IES SP	427	2659
IES SP	2636	2812
SON GR CAL	1280	2656





SON GR CAL	2634	2808
TEMP	94	1676
VELOCITY	304	2572

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	149.0	36	149.0	0.00	LOT
SURF.COND.	20	369.0	26	381.0	0.00	LOT
INTERM.	13 3/8	1283.0	17 1/2	1295.0	0.00	LOT
INTERM.	9 5/8	2638.0	12 1/4	2660.0	0.00	LOT
LINER	7	2716.0	8 1/2	2797.0	0.00	LOT
OPEN HOLE		2806.0	6	2806.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
144	1.08			sw w gel	
382	1.13			sw w gel	
1295	1.30			sw w gel	
2660	1.80			sw w gel	
2806	1.70			sw w gel	