

**General information**

Wellbore name	2/7-16
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	2/7-16
Seismic location	PG-2/7-F
Production licence	018
Drilling operator	Phillips Petroleum Company Norway
Drill permit	245-L
Drilling facility	NORTRYM
Drilling days	115
Entered date	20.03.1980
Completed date	12.07.1980
Release date	12.07.1982
Publication date	18.01.2007
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	71.0
Total depth (MD) [m RKB]	4818.0
Final vertical depth (TVD) [m RKB]	4812.0
Maximum inclination [°]	4.75
Bottom hole temperature [°C]	125
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	ÅSGARD FM
Geodetic datum	ED50
NS degrees	56° 25' 21.68" N
EW degrees	3° 5' 41.87" E
NS UTM [m]	6253268.30
EW UTM [m]	505858.17
UTM zone	31
NPDID wellbore	232



Wellbore history

General

Wildcat well 2/7-16 was drilled on a structure on a broad terrace to the south of Edda field and with a geological environment similar to Edda. The primary objective was to test the potential for hydrocarbon production from Danian and Late Cretaceous Limestones on a low relief structural closure. Secondary objective was a possible stratigraphic trap potential in Early Cretaceous sandstones.

Operations and results

Well 2/7-16 was spudded with the semi-submersible installation Nortrym on 20 March 1980 and drilled to TD at 4818 m in the Early Cretaceous Ågard Formation. The well was drilled with Seawater/Native Solids mud down to the 13 3/8" casing point at 1523 m, with Seawater/Lignosulphonate from 1523 m to the 9 5/8" casing point at 3794 m, and with Calcium chloride/Sodium chloride XC polymer mud from 3794 m to TD.

Hydrocarbon shows were encountered in the Danian and Upper Cretaceous limestone. The porosity was poorly developed and testing verified the zones to be non-productive. Early Cretaceous had shows in limestones, claystones, shales, and marls, but no sandstones were found.

Thirteen conventional cores were cut continuously from 3182 m to 3402 m in the Ekofisk and Tor Formations Formations. Twenty-five RFT measurements were attempted in the gross interval 3823.8 - 4783.6 m. A fluid sample was obtained at 4587.9 m. It contained 50 ml formation water and 39 cubic feet (1.1 Sm3) gas.

The well was permanently abandoned on 12 July 1980 as a dry well with shows.

Testing

Two drill stem tests were conducted. DST 1 at 3279.7 to 3288.8 m in the Tor Formation produced 660 barrels (105 m3) of water /day, with traces of oil and gas. DST 2 from the intervals 3193.1 - 3199.8 and 3201.4 - 3215.4 m in the Ekofisk Formation produced 28.8 barrels (4.6 m3) water /day with no oil or gas before acid treatment. Well died completely after acid, with only a very weak flow of acid gas.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
637.00	4817.00

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	10441.0	10501.0	[ft]



2	10501.0	10558.9	[ft]
3	10560.0	10619.6	[ft]
4	10621.0	10661.1	[ft]
5	10681.0	10729.0	[ft]
6	10730.0	10788.0	[ft]
7	10790.0	10841.6	[ft]
8	10843.0	10901.6	[ft]
9	10903.0	10908.6	[ft]
10	10921.0	10981.0	[ft]
11	10981.0	11038.6	[ft]
12	11041.0	11101.0	[ft]
13	11101.0	11161.0	[ft]
14	11163.0	11172.0	[ft]

Total core sample length [m]	209.1
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
96	NORDLAND GP
1714	HORDALAND GP
2995	ROGALAND GP
2995	BALDER FM
3012	SELE FM
3080	LISTA FM
3150	VÅLE FM
3182	SHETLAND GP
3182	EKOFISK FM
3264	TOR FM
3500	HOD FM
3967	BLODØKS FM
3975	HIDRA FM
4271	CROMER KNOLL GP
4271	RØDBY FM
4359	SOLA FM
4533	ÅSGARD FM

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

Document name	Document format	Document size [MB]
232_01_WDSS_General_Information	pdf	0.13
232_02_WDSS_completion_log	pdf	0.29

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

Document name	Document format	Document size [MB]
232_01_2_7_16_Completion_Report	pdf	31.79
232_02_2_7_16_Completion_log.1	pdf	3.09

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	3254	3263	0.0
2.0	3168	3190	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					

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DLL BHC GR SP	3793	4816
FDC CNL GR CAL	2834	4817
HDT	1524	3805
ISF BHC GR CAL SP	164	3814





ML MLL	3791	4817
VELOCITY	625	4818

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	139.0	36	140.0	0.00	LOT
SURF.COND.	20	587.0	26	605.0	1.53	LOT
INTERM.	13 3/8	1497.0	17 1/2	1513.0	2.04	LOT
INTERM.	9 5/8	3769.0	12 1/4	3788.0	2.09	LOT
LINER	7	4818.0	8 1/2	4818.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
627	1.13	80.0		WATER BASED	12.07.1980
1201	1.25	48.0		WATER BASED	12.07.1980
1538	1.37	34.0		WATER BASED	12.07.1980
2306	1.73	58.0		WATER BASED	12.07.1980
2561	1.72	47.0		WATER BASED	12.07.1980
2824	1.72	62.0		WATER BASED	12.07.1980
3201	1.70	60.0		WATER BASED	12.07.1980
3220	1.69	56.0		WATER BASED	12.07.1980
3432	1.49	58.0		WATER BASED	12.07.1980
4115	1.64	65.0		WATER BASED	12.07.1980
4674	1.78	55.0		WATER BASED	12.07.1980
4817	1.88	47.0		WATER BASED	12.07.1980

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]
232 Formation pressure (Formasjonstrykk)	pdf	0.21

