



General information





Wellbore name	17/3-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	17/3-1
Well name	17/3-1
Seismic location	EL 9401-222- SP 382 & GES 89-14 SP 508
Production licence	188
Drilling operator	Elf Petroleum Norge AS
Drill permit	815-L
Drilling facility	VILDKAT EXPLORER
Drilling days	53
Entered date	29.06.1995
Completed date	20.08.1995
Release date	20.08.1997
Publication date	24.09.2002
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	SANDNES FM
Kelly bushing elevation [m]	25.0
Water depth [m]	273.0
Total depth (MD) [m RKB]	2852.0
Final vertical depth (TVD) [m RKB]	2852.0
Maximum inclination [°]	3.19
Bottom hole temperature [°C]	98
Oldest penetrated age	PRE-DEVONIAN
Oldest penetrated formation	BASEMENT
Geodetic datum	ED50
NS degrees	58° 55' 2.5" N
EW degrees	3° 48' 21.33" E
NS UTM [m]	6531280.15
EW UTM [m]	546414.75
UTM zone	31
NPDID wellbore	2576



Wellbore history

General

Block 17/3 is situated approximately in the center of a broad, elongated Triassic rift basin composed of the Stord and Egersund basins. The well is located on a well-defined horst structure (Bark Prospect) in the northern part of the block, in an almost unexplored area in the southern part of the Stord Basin. Due to the "wildcat" nature of the well there were many unknowns and "worst case scenarios" had to be planned for. The well was designed for two objectives with different pressure regimes: The primary objective was the Late Jurassic Sandnes Formation at 1.20 sg. The Permian Rotliegendes Group at 1.55 sg was a secondary objective. This necessitated an expensive deep 13 3/8" casing (2312 m) to ensure that the 2 objectives could be properly evaluated and that the well could be completed in the 8 1/2" section. The expected hydrocarbon phase was oil. The prognosed TD of the well was 3300 m RKB, 309 m below the supposed Top Rotliegendes. This was in order to reach the highly dipping markers of assumed Paleoz

Operations and results

Wildcat well 17/3-1 was spudded with the semi-submersible installation "Wildcat Explorer" on 29 June 1995 and drilled to a total depth of 2852.15 m in metamorphic basement rock, dated 410 My. The well was drilled with seawater down to 949 m and with water based gypsum mud from 949 m to TD. The well came in under budget and almost 14 days ahead of schedule. A major contributing factor to the latter was the shallower than expected TD, 2852 m (basement) as opposed to 3300 m, due to the Permian section being non-existent. The primary objective Sandnes Formation was encountered at 2387 - 2409 m, about 50 m shallower than prognosed, with a hydrostatic pore pressure (1.05 sg emw from RFT and MDT) and only ~2 m of gas was found at the top of the reservoir. The Permian series were not present, as the Triassic Smith Bank Formation was directly deposited on metamorphic basement. The secondary objective, the Rotliegendes Group, was never encountered due to the missing Permian series. The well was permanently plugged and abandoned on 22 August 1995 as a gas discovery.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
955.00	2845.00

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	2388.0	2390.0	[m]
2	2391.0	2400.2	[m]



3	2400.2	2417.9	[m]
4	2849.0	2852.2	[m]

Total core sample length [m]	32.0
Cores available for sampling?	YES

Core photos

2388-2390m



2391-2396m



2396-2400m



2400-2405m



2405-2410m



2410-2415m



2415-2418m



2849-2852m

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
298	NORDLAND GP
396	HORDALAND GP
873	ROGALAND GP
873	BALDER FM
942	SELE FM
966	LISTA FM
1001	VÅLE FM
1030	SHETLAND GP
1030	TOR FM
1271	HOD FM
1380	CROMER KNOLL GP
1380	RØDBY FM
1425	SOLA FM
1505	ÅSGARD FM



1875	BOKNFJORD GP
1875	FLEKKEFJORD FM
1980	SAUDA FM
2311	TAU FM
2339	EGERSUND FM
2388	VESTLAND GP
2388	SANDNES FM
2410	BRYNE FM
2440	NO GROUP DEFINED
2440	SMITH BANK FM
2811	BASEMENT

Composite logs

Document name	Document format	Document size [MB]
2576	pdf	0.40

Geochemical information

Document name	Document format	Document size [MB]
2576_1	pdf	1.22
2576_2	pdf	1.97
2576_3	pdf	1.04

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

Document name	Document format	Document size [MB]
2576_17_3_1_COMPLETION_REPORT_AND_LOG	pdf	44.94

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AMS FMS GR	2315	2849
CST GR	2324	2840





DIL AMS MSF BHC GR	2315	2846
LDL AMS BHC GR	942	2310
LDL CNL AMS NGT GR	2315	2849
MDT GR	2388	2438
MGR MEM DIR	298	2849
RFT GR	2389	2438
VSP	730	2840

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
SURF.COND.	30	443.0	36	445.0	0.00	LOT
CONDUCTOR	20	943.0	26	949.0	0.00	LOT
INTERM.	13 3/8	2312.0	17 1/2	2319.0	0.00	LOT
OPEN HOLE		2852.0	12 1/4	2852.0	1.35	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
330	1.03			WATER BASED	
443	1.03			WATER BASED	
445	1.03			WATER BASED	
492	1.37			WATER BASED	
500	1.37			WATER BASED	
627	1.37			WATER BASED	
847	1.03			WATER BASED	
943	1.26	19.0		WATER BASED	
949	1.03			WATER BASED	
1133	1.35	22.0		WATER BASED	
1247	1.35	23.0		WATER BASED	
1315	1.35	27.0		WATER BASED	
1538	1.35	27.0		WATER BASED	
1695	1.35	26.0		WATER BASED	
1732	1.35	24.0		WATER BASED	
1836	1.35	25.0		WATER BASED	
1942	1.35	27.0		WATER BASED	
1976	1.35	27.0		WATER BASED	



2009	1.35	24.0		WATER BASED	
2111	1.35	26.0		WATER BASED	
2161	1.35	27.0		WATER BASED	
2233	1.35	26.0		WATER BASED	
2312	1.35	25.0		WATER BASED	
2318	1.35	26.0		WATER BASED	
2319	1.35	28.0		WATER BASED	
2390	1.35	24.0		WATER BASED	
2400	1.35	21.0		WATER BASED	
2427	1.35	23.0		WATER BASED	
2483	1.35	32.0		WATER BASED	
2494	1.35	28.0		WATER BASED	
2591	1.35	24.0		WATER BASED	
2633	1.35	25.0		WATER BASED	
2691	1.35	25.0		WATER BASED	
2744	1.35	23.0		WATER BASED	
2840	1.35	28.0		WATER BASED	
2846	1.35	27.0		WATER BASED	
2849	1.35	24.0		WATER BASED	
2850	1.35	23.0		WATER BASED	
2852	1.35	23.0		WATER BASED	

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]
2576 Formation pressure (Formasjonstrykk)	pdf	0.22

