

**General information**

Wellbore name	25/1-6
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	25/1-6
Seismic location	SP 150 line 680301
Production licence	024
Drilling operator	Elf Petroleum Norge AS
Drill permit	190-L
Drilling facility	PENTAGONE 84
Drilling days	52
Entered date	26.01.1978
Completed date	18.03.1978
Release date	18.03.1980
Publication date	01.07.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	24.0
Water depth [m]	105.0
Total depth (MD) [m RKB]	2895.0
Final vertical depth (TVD) [m RKB]	2894.0
Maximum inclination [°]	2.2
Bottom hole temperature [°C]	54
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	JORSALFARE FM
Geodetic datum	ED50
NS degrees	59° 46' 57.68" N
EW degrees	2° 5' 42.23" E
NS UTM [m]	6627711.35
EW UTM [m]	449192.60
UTM zone	31
NPDID wellbore	352



Wellbore history

General

Exploration well 25/1-6 is located 12 km southwards of the 25/1-1 well and 6 km south of the Frigg Field boundary. The main objective was a Paleocene seismic structure underlined by a strong discontinuous flat seismic event.

Geological correlations and geophysical studies indicated a detritic sand body belonging to the Heimdal formation. The Cod or Heimdal clay layer could be the closure of this structure. The structurally closed Frigg, Cod, and Danian Sands, and Late Cretaceous chalk were secondary objectives.

Operations and results

Well 25/6-1 was spudded with the semi-submersible installation Pentagone 84 on 26 January 1978 after spending 10 days on the location waiting on weather. No significant problems were encountered during the drilling to TD at 2895 m in Late Cretaceous limestone. The well was drilled with spud mud to 192 m, with CMC/Bentonite from 192 m to 468 m, and with Lignosulfonate/Dextrid mud from 468 m to TD.

The first interval of interest was the Eocene Frigg Formation from 2107 m to 2150. This interval turned out to be shaly with thin sand layers up to 3 meter thick only. Some oil shows were recorded in the sands. In the lower part of the Frigg Formation a core was taken with four thin interbeds of sandstones medium to fine grained and weakly cemented. These sandstones were fluorescent (light yellow) and gave a fluorescent, light yellow extract. Massive Heimdal Formation sand was encountered from 2249 m to 2563 m. The unit has good reservoir characteristics with translucent fine to coarse, subrounded to subangular, mostly well-sorted sand. The porosity of the sandy levels varies from 20 to 25% and net sand thickness is about 226 m. The unit was water bearing. No shows were encountered during the drilling or on the lab. The lower part (2675 m to 2799 m) of the Danian sequence (Ty Formation) was composed of many intercalations of sandy levels and shaly beds. The sandy intervals had poor porosity except from 2752 m to 2758 m and from 2786 m to 2799 m where it reached 15%. The considered "flat event" was due to a velocity contrast between the shales and hard sandstone beds, which marked a lithological change within the Danian formations. The Late Cretaceous chalky limestones were encountered at 2799 m. They were tight (porosity about 5%) and without any shows. No fluid samples were taken in the well. The well was permanently abandoned as dry on 18 March 1978.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
200.00	2900.00

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	2127.0	2136.0	[m]

Total core sample length [m]	9.0
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
2205.0	[m]	DC	PETROSTR
2220.0	[m]	DC	PETROS
2225.0	[m]	DC	PETROS
2235.0	[m]	DC	PETROS
2245.0	[m]	DC	PETROS
2330.0	[m]	DC	PETROS
2335.0	[m]	DC	PETROS
2375.0	[m]	DC	PETROS
2385.0	[m]	DC	PETROS
2700.0	[m]	DC	RRI
2710.0	[m]	DC	RRI
2740.0	[m]	DC	RRI
2750.0	[m]	DC	RRI
2790.0	[m]	DC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
129	NORDLAND GP
315	UTSIRA FM
363	UNDIFFERENTIATED
698	HORDALAND GP
2107	FRIGG FM
2150	ROGALAND GP
2150	BALDER FM
2167	SELE FM
2195	LISTA FM



2249	HEIMDAL FM
2563	LISTA FM
2675	TY FM
2799	SHETLAND GP
2799	JORSALFARE FM

Composite logs

Document name	Document format	Document size [MB]
352	pdf	0.44

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

Document name	Document format	Document size [MB]
352_01_WDSS_General_Information	pdf	0.45
352_03_WDSS_lithlog	pdf	0.06

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

Document name	Document format	Document size [MB]
352_1_Completion_Report_and_Completion_Log	pdf	5.34
352_2_Drilling_report	pdf	14.65
352_3_Geological_completion_report	PDF	5.39
352_4_Geological_well_prognosis_and_drilling_program	pdf	23.07
352_5_Note_on_results	pdf	15.46
352_6_Sedimentological_study_of_basal_tertiary_formations	pdf	5.16

Logs

Log type	Log top depth [m]	Log bottom depth [m]
BGT	1314	2550
FDC CNL CAL	192	468
FDC CNL CAL GR	457	1322





FDC CNL GR CAL	2399	2550
FDC CNL GR CAL	2523	2895
FDC GR CAL CNL	1314	2400
FDC GR CAL CNL	2399	2550
HDT	2000	2550
HDT	2523	2895
ISF BHC GR	192	468
ISF BHC GR	457	1322
ISF BHC GR	1314	2098
ISF BHC GR	1998	2400
ISF SL GR SP	2399	2550
ISF SL GR SP	2523	2895

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	192.7	36	193.0	0.00	LOT
SURF.COND.	20	460.0	26	463.0	0.00	LOT
INTERM.	13 3/8	1314.0	17 1/2	1320.0	0.00	LOT
INTERM.	9 5/8	2520.0	12 1/4	2545.0	0.00	LOT
OPEN HOLE		2895.0	8 1/2	2895.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
192	1.05	85.0		water based	
468	1.08	16.0		water based	
1325	1.14	42.0		water based	
1937	1.20	72.0		water based	
2120	1.20	63.0		water based	
2360	1.28	28.0		water based	
2550	1.30	27.0		water based	
2739	1.16	14.0		water based	