

**General information**

Wellbore name	6507/10-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6507/10-1
Seismic location	725 474 SP 718.66 X-OVER 725 280
Production licence	075
Drilling operator	BP Norway Limited U.A.
Drill permit	337-L
Drilling facility	SEDCO 707
Drilling days	114
Entered date	10.07.1982
Completed date	31.10.1982
Release date	31.10.1984
Publication date	13.12.2005
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	297.0
Total depth (MD) [m RKB]	3693.0
Final vertical depth (TVD) [m RKB]	3687.0
Maximum inclination [°]	8.5
Bottom hole temperature [°C]	112
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	ÅRE FM
Geodetic datum	ED50
NS degrees	65° 13' 10.75" N
EW degrees	7° 14' 0.47" E
NS UTM [m]	7234272.64
EW UTM [m]	417384.99
UTM zone	32
NPDID wellbore	81



Wellbore history

General

Exploration well 6507/10-1 was the sixth well drilled on the Mid Norway continental shelf area. It is located in between later discoveries such as SmØrbukk, Heidrun, and Midgard. The main targets of the well were sandstones of middle to Late Jurassic age. Secondary targets were sandstones of Early Tertiary, Early Jurassic and Triassic age.

The well is Reference Well for the Ror Formation.

Operations and results

Wildcat well 6507/10-1 was spudded with the semi-submersible installation Sedco 707 on 10 July 1982 and drilled to TD at 3693 m in the Åre Formation. Tight hole was experienced at the bottom of the 13 3/8" section. While drilling the 12 1/4" section the drill string stuck. After several attempts to free the string, the well was sidetracked. The sidetrack was drilled to 2007 m where the string again got stuck. The well was then sidetracked again to 2220 m at which point the string got stuck again. This time the string was jarred free and the 12 1/4" hole was finally drilled to 2780 m. Problems with the BOP and wellhead delayed operations in the 8 1/2" section. The well was drilled with spud mud down to 440 m, with a sea water/clay built native mud from 440 m to 913 m, and with CMC/gypsum mud from 1971 m to 2149 m. From 2149 m to 2780 m the mud was gradually broken over to a lignosulphonate (Spersene) mud, and from 2780 m to TD a Spersene/XP 20 mud was used.

Sandstones were found in the Middle and Early Jurassic. The Early Tertiary sandstones were not present. The Triassic sandstone horizon was not penetrated. An 11% methane gas peak was recorded from a Miocene sandstone at 590 m but no fluorescence was noted. Sandstone in the interval 1790-1805 m produced a slow crush cut fluorescence as did the Late Jurassic mudstone between 2779 m and 2828 m in the Spekk Formation. These were the only hydrocarbon indications recorded in the well. Logs and RFT pressure gradients proved all potential reservoir sections in the well to be 100% water wet. Organic geochemical analysis of the Jurassic sandstones confirmed the general lack of migrated hydrocarbons and found the well to be thermally immature down to about ca 3000 m.

Two cores were taken at 2880.5 m to 2889.5 m and 3073.6 m to 3083.2 m in the Ile and Tilje Formations, respectively.

No fluid samples were taken.

The well was permanently abandoned on 31 October 1982 as a dry well.

Testing

No drill stem test was performed in the well.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
440.00	3695.00

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	2880.5	2887.4	[m]
2	3073.6	3081.9	[m]

Total core sample length [m]	15.2
Cores available for sampling?	YES

Core photos

2880-2886m



2886-2887m



3073-3079m



3079-3081m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
450.0	[m]	DC	BP
520.0	[m]	DC	BP
620.0	[m]	DC	BP
720.0	[m]	DC	BP
820.0	[m]	DC	BP
920.0	[m]	DC	BP
1020.0	[m]	DC	BP
1120.0	[m]	DC	BP
1220.0	[m]	DC	BP
1320.0	[m]	DC	BP
1420.0	[m]	DC	BP
1520.0	[m]	DC	BP
1620.0	[m]	DC	BP
1670.0	[m]	DC	BP
1720.0	[m]	DC	BP



1770.0 [m]	DC	BP
1795.0 [m]	DC	BP
1820.0 [m]	DC	BP
1870.0 [m]	DC	BP
1895.0 [m]	DC	BP
1920.0 [m]	DC	BP
1945.0 [m]	DC	BP
1975.0 [m]	DC	BP
2000.0 [m]	DC	BP
2030.0 [m]	DC	BP
2040.0 [m]	DC	BP
2050.0 [m]	DC	BP
2075.0 [m]	DC	BP
2080.0 [m]	DC	SAGA
2090.0 [m]	DC	BP
2090.0 [m]	DC	SAGA
2100.0 [m]	DC	BP
2100.0 [m]	DC	SAGA
2105.0 [m]	DC	BP
2110.0 [m]	DC	BP
2110.0 [m]	DC	SAGA
2120.0 [m]	DC	BP
2130.0 [m]	DC	SAGA
2135.0 [m]	DC	BP
2150.0 [m]	DC	BP
2150.0 [m]	DC	SAGA
2170.0 [m]	DC	SAGA
2190.0 [m]	DC	SAGA
2200.0 [m]	DC	BP
2210.0 [m]	DC	SAGA
2230.0 [m]	DC	SAGA
2250.0 [m]	DC	BP
2250.0 [m]	DC	SAGA
2270.0 [m]	DC	SAGA
2290.0 [m]	DC	SAGA
2300.0 [m]	DC	BP
2310.0 [m]	DC	SAGA
2330.0 [m]	DC	SAGA
2350.0 [m]	DC	BP
2350.0 [m]	DC	SAGA



2370.0 [m]	DC	SAGA
2390.0 [m]	DC	SAGA
2400.0 [m]	DC	BP
2410.0 [m]	DC	SAGA
2430.0 [m]	DC	SAGA
2450.0 [m]	DC	BP
2455.0 [m]	DC	SAGA
2470.0 [m]	DC	SAGA
2490.0 [m]	DC	SAGA
2500.0 [m]	DC	BP
2510.0 [m]	DC	SAGA
2530.0 [m]	DC	SAGA
2550.0 [m]	DC	BP
2550.0 [m]	DC	SAGA
2570.0 [m]	DC	SAGA
2590.0 [m]	DC	SAGA
2600.0 [m]	DC	BP
2610.0 [m]	DC	SAGA
2630.0 [m]	DC	SAGA
2650.0 [m]	DC	BP
2650.0 [m]	DC	SAGA
2670.0 [m]	DC	SAGA
2690.0 [m]	DC	SAGA
2700.0 [m]	DC	BP
2700.0 [m]	DC	SAGA
2710.0 [m]	DC	SAGA
2720.0 [m]	DC	SAGA
2730.0 [m]	DC	BP
2730.0 [m]	DC	SAGA
2740.0 [m]	DC	SAGA
2750.0 [m]	DC	BP
2750.0 [m]	DC	SAGA
2760.0 [m]	DC	SAGA
2770.0 [m]	DC	SAGA
2775.0 [m]	SWC	BP
2775.0 [m]	DC	SAGA
2780.0 [m]	DC	BP
2780.0 [m]	SWC	BP
2780.0 [m]	DC	SAGA
2785.0 [m]	SWC	BP



2790.0 [m]	SWC	BP
2807.0 [m]	DC	BP
2810.0 [m]	SWC	BP
2825.0 [m]	DC	BP
2831.0 [m]	SWC	BP
2848.0 [m]	SWC	BP
2852.0 [m]	DC	BP
2877.0 [m]	SWC	BP
2879.0 [m]	DC	BP
2912.0 [m]	DC	BP
2951.0 [m]	DC	BP
2975.0 [m]	DC	BP
2996.0 [m]	SWC	BP
3002.0 [m]	DC	BP
3005.0 [m]	SWC	BP
3032.0 [m]	DC	BP
3055.0 [m]	DC	BP
3081.0 [m]	DC	BP
3082.2 [m]	DC	BP
3098.0 [m]	DC	BP
3120.0 [m]	SWC	BP
3145.0 [m]	DC	BP
3200.0 [m]	DC	BP
3251.0 [m]	DC	BP
3276.0 [m]	SWC	BP
3301.0 [m]	SWC	BP
3302.0 [m]	DC	BP
3350.0 [m]	DC	BP
3400.0 [m]	SWC	BP
3401.0 [m]	DC	BP
3450.0 [m]	SWC	BP
3452.0 [m]	DC	BP
3499.0 [m]	SWC	BP
3500.0 [m]	DC	BP
3548.0 [m]	DC	BP
3560.0 [m]	DC	BP
3602.0 [m]	DC	BP
3603.9 [m]	SWC	BP
3647.0 [m]	DC	BP
3656.0 [m]	DC	BP



3671.0	[m]	DC	BP
3695.0	[m]	DC	BP

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
322	NORDLAND GP
1439	HORDALAND GP
1439	BRYGGE FM
1980	ROGALAND GP
1980	TARE FM
2040	TANG FM
2088	SHETLAND GP
2088	SPRINGAR FM
2550	NISE FM
2660	KVITNOS FM
2725	CROMER KNOLL GP
2725	LYSING FM
2728	LANGE FM
2770	LYR FM
2781	VIKING GP
2781	SPEKK FM
2835	MELKE FM
2881	FANGST GP
2881	ILE FM
2994	BÅT GP
2994	ROR FM
3081	TILJE FM
3226	ÅRE FM

Composite logs

Document name	Document format	Document size [MB]
81	pdf	0.63

Geochemical information





Document name	Document format	Document size [MB]
81_1	pdf	0.22
81_2	pdf	0.28
81_3	pdf	1.21
81_4	pdf	1.53

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

Document name	Document format	Document size [MB]
81_01 WDSS General Information	pdf	0.17
81_02 WDSS completion log	pdf	0.23

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

Document name	Document format	Document size [MB]
81_01 Geological CompletionReport & Completionlog	pdf	14.43
81_02 Engineering CompletionReport	pdf	1.52
81_03 Drilling Completion Report	pdf	33.04
81_04 Depositional Environments and Reservoir Potential	pdf	34.00
81_05 Final core report 1-2	pdf	0.32
81_06 Geochemical analysis of four jurassic core	pdf	0.56
81_07 Geochemical analysis of sediments	pdf	2.21
81_08 Geological evaluation report	pdf	19.93
81_09 Petrophysical study of norwegian off shore	pdf	12.26
81_10 Petrophysical study Appendix	pdf	32.84
81_11 Pressure evaluation	pdf	73.69
81_12 Stratigraphy branch	pdf	16.62
81_13 The clay mineral analysis of twenty seven	pdf	1.08
81_14 The Petroleum Geochemistry of Haltenbanken	pdf	7.69

Logs





Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL GR	1480	2769
CBL VDL GR	1700	1951
CST GR	2775	3667
HDT	2770	3415
ISF BFCS MSFL CAL GR SP	903	1969
ISF BHCS GR SP	436	897
ISF BHCS MSFL CAL GR SP	1818	2779
ISF BHCS MSFL CAL GR SP	2770	3697
LDL CNL CAL GR	2770	3697
RFT GR	2884	3658
VSP	475	3685

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	436.0	36	440.0	0.00	LOT
SURF.COND.	18 5/8	903.0	24	913.0	1.50	LOT
INTERM.	13 3/8	1954.0	17 1/2	1971.0	1.48	LOT
OPEN HOLE		1990.0	12 1/4	1990.0	0.00	LOT
OPEN HOLE		2149.0	12 1/4	2149.0	0.00	LOT
INTERM.	9 5/8	2771.0	12 1/4	2780.0	1.87	LOT
OPEN HOLE		3693.0	8 1/2	3693.0	0.00	LOT

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]
81 Formation pressure (Formasjonstrykk)	pdf	0.28

