

**General information**

Wellbore name	6507/12-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6507/12-3
Seismic location	SG 8258 - 103 SP. 1112
Production licence	059
Drilling operator	Saga Petroleum ASA
Drill permit	481-L
Drilling facility	TREASURE SAGA
Drilling days	29
Entered date	16.08.1985
Completed date	13.09.1985
Release date	13.09.1987
Publication date	08.03.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	26.0
Water depth [m]	240.0
Total depth (MD) [m RKB]	2600.0
Final vertical depth (TVD) [m RKB]	2600.0
Maximum inclination [°]	1
Bottom hole temperature [°C]	80
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	ÅRE FM
Geodetic datum	ED50
NS degrees	65° 3' 35.82" N
EW degrees	7° 49' 6.4" E
NS UTM [m]	7215836.28
EW UTM [m]	444406.39
UTM zone	32
NPDID wellbore	485



Wellbore history

General

Wildcat well 6507/12-3 was drilled east of and near to the Midgard field on Haltenbanken. The main objective was to test the W-1 prospect located on the western margin of the Trøndelag Platform, on the eastern edge of the Ellingråsa Graben. The structure was seen as a domed N-S striking horst restricted by the main platform fault to the west and a related antithetic fault to the east with throws of approximately 350 m and 100 m, respectively. Primary target was the Middle Jurassic sandstones of the Fangst Group. A secondary target was the Lower Jurassic sandstones of the Tilje Formation, and to penetrate the coal horizon in the Åre Formation. Proposed TD was at 2700 m.

Operations and results

Well 6507/12-3 was spudded with Wi1h. Wi1helmsen semi-submersible installation Treasure Saga on 16 August 1985 and drilled to TD at 2600 m in the Early Jurassic Åre Formation. The well was drilled with spud mud down to 380 m, with gel mud from 380 m to 920 m, with Gypsum / Polymer mud from 920 m to 1949 m, and with a gel mud again from 1949 m to TD. A gas flow occurred between the 20" and 30" casing. The casing was perforated at 705 m and cement successfully squeezed. Gas flow continued to be a problem and the 13 3/8" casing was also perforated and cement squeeze was performed in both the lower and upper perforations.

The Quaternary/Tertiary Sequence was 1596 m thick and consisted predominantly of marine claystones. Cretaceous was represented by a 75 m sequence of Springar Formation. Two metre of Spekk Formation was encountered at 1937 m, followed by 33 m of Melke Formation. The Fangst Group was penetrated at 1974 m, 20 m above the prognosed depth. MWD displayed fall in resistivity and the formation was considered dry. All Jurassic sandstone sequences were water bearing. A number of gas peaks were recorded from 474 m to 804 m, but there were no oil shows observed in the well.

Two cores were attempted in the interval 1981 m to 2016 m in the Garn Formation, but only the 1981 to 1988.5 m interval of the first was recovered. A third core was cut for source rock studies in the interval 2503.5 m to 2521.5 m in the Åre Formation. The well was permanently abandoned on 13 September 1985 as a dry well.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
390.00	2600.00

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	1981.0	1988.5	[m]
3	2503.5	2519.0	[m]

Total core sample length [m]	23.0
Cores available for sampling?	YES

Core photos

1981-1983m



2507-2510m



1988-1989m



2503-2506m



1984-1987m



2511-2514m



2515-2518m



2519-2520m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1780.0	[m]	SWC	SAGA
1800.0	[m]	SWC	SAGA
1820.0	[m]	DC	SAGA
1823.0	[m]	SWC	SAGA
1830.0	[m]	SWC	SAGA
1840.0	[m]	SWC	SAGA
1850.0	[m]	SWC	SAGA
1858.0	[m]	SWC	SAGA
1863.0	[m]	SWC	SAGA
1868.0	[m]	SWC	SAGA
1882.0	[m]	SWC	SAGA
1892.0	[m]	SWC	SAGA
1907.1	[m]	SWC	SAGA



1925.0	[m]	DC	SAGA
1940.0	[m]	DC	SAGA
1955.0	[m]	DC	SAGA
1968.0	[m]	DC	SAGA
1981.9	[m]	C	SAGA
1989.0	[m]	DC	SAGA
1998.0	[m]	DC	SAGA
2008.0	[m]	SWC	SAGA
2027.0	[m]	SWC	SAGA
2037.0	[m]	SWC	SAGA
2058.0	[m]	SWC	SAGA
2080.0	[m]	SWC	SAGA
2102.0	[m]	SWC	SAGA
2111.0	[m]	SWC	SAGA
2133.0	[m]	SWC	SAGA
2147.0	[m]	SWC	SAGA
2160.0	[m]	DC	SAGA
2185.0	[m]	SWC	SAGA
2203.0	[m]	SWC	SAGA
2212.0	[m]	SWC	SAGA
2230.0	[m]	SWC	SAGA
2244.0	[m]	DC	SAGA
2268.0	[m]	SWC	SAGA
2297.0	[m]	SWC	SAGA
2313.0	[m]	DC	SAGA
2331.0	[m]	DC	SAGA
2346.0	[m]	DC	SAGA
2358.0	[m]	DC	SAGA
2376.0	[m]	DC	SAGA
2383.0	[m]	SWC	SAGA
2393.0	[m]	SWC	SAGA
2410.0	[m]	SWC	SAGA
2424.0	[m]	DC	SAGA
2439.0	[m]	DC	SAGA
2450.0	[m]	SWC	SAGA
2462.0	[m]	SWC	SAGA
2472.5	[m]	SWC	SAGA
2478.0	[m]	DC	SAGA
2499.0	[m]	DC	SAGA
2503.5	[m]	C	SAGA



2514.0	[m]	SWC	SAGA
2519.8	[m]	C	SAGA
2529.0	[m]	DC	SAGA
2544.0	[m]	DC	SAGA
2557.0	[m]	SWC	SAGA
2574.0	[m]	SWC	SAGA
2592.0	[m]	DC	SAGA
2600.0	[m]	DC	SAGA

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
266	NORDLAND GP
266	NAUST FM
1311	KAI FM
1425	HORDALAND GP
1425	BRYGGE FM
1770	ROGALAND GP
1770	TARE FM
1823	TANG FM
1862	SHETLAND GP
1862	SPRINGAR FM
1937	VIKING GP
1937	SPEKK FM
1939	MELKE FM
1972	FANGST GP
1972	GARN FM
2015	NOT FM
2032	ILE FM
2098	BÅT GP
2098	ROR FM
2186	TILJE FM
2351	ÅRE FM

Composite logs

Document name	Document format	Document size [MB]
485	pdf	0.35





Geochemical information

Document name	Document format	Document size [MB]
485_1	pdf	1.18

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

Document name	Document format	Document size [MB]
485_01_WDSS_General_Information	pdf	0.28
485_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]
485_6507_12_3_COMPLETION_REPORT_AND_LOG	pdf	48.65

Logs

Log type	Log top depth [m]	Log bottom depth [m]
ACBL	700	1948
CDL CNL GR	1935	2596
COREGUN	1968	2583
DIFL LSBHC CDL GR COREGUN	904	1963
DIFL LSBHC GR	1923	2596
DIFL TEMP GR	266	886
DIPLOG	1948	2596
FMT	1973	2482
GR	270	380
MWD - GR RES DIR	375	920
MWD - GR RES DIR	1028	2600
VSP	270	2591



**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	375.0	36	380.0	0.00	LOT
SURF.COND.	20	905.0	26	920.0	1.41	LOT
INTERM.	13 3/8	1949.0	17 1/2	1965.0	1.82	LOT
OPEN HOLE		2600.0	12 1/4	2600.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
633	1.15	9.0	30.0	WATER BASED	21.08.1985
920	1.17	8.0	42.0	WATER BASED	21.08.1985
1028	1.15	43.0	16.0	WATER BASED	27.08.1985
1338	1.15	42.0	18.0	WATER BASED	28.08.1985
1635	1.25	45.0	19.0	WATER BASED	29.08.1985
1965	1.30	47.0	14.0	WATER BASED	30.08.1985
1965	1.35	55.0	18.0	WATER BASED	02.09.1985
1965	1.27	16.0	17.0	WATER BASED	05.09.1985
1966	1.27	16.0	17.0	WATER BASED	09.09.1985
2118	1.23	17.0	17.0	WATER BASED	09.09.1985
2200	1.20	17.0	16.0	WATER BASED	09.09.1985

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]
485 Formation pressure (Formasjonstrykk)	pdf	0.27

