General information

Wellbore name	6507/8-5
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6507/8-5
Seismic location	ST 8904-401 SP 350/ST 8002-494 SP 156
Production licence	124
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	670-L
Drilling facility	ROSS RIG (2)
Drilling days	15
Entered date	02.03.1991
Completed date	16.03.1991
Release date	16.03.1993
Publication date	08.03.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	23.0
Water depth [m]	332.0
Total depth (MD) [m RKB]	2000.0
Final vertical depth (TVD) [m RKB]	2000.0
Maximum inclination [°]	1.1
Bottom hole temperature [°C]	65
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	TILJE FM
Geodetic datum	ED50
NS degrees	65° 20' 36.75'' N
EW degrees	7° 38' 4.7'' E
NS UTM [m]	7247612.81
EW UTM [m]	436442.87
UTM zone	32
NPDID wellbore	1749

Wellbore history

General

Well 6507/8-5 was designed to drill the Omega prospect, a horst, located east of the Heidrun Field. Structurally the area is situated on the Sør High with the Halten Terrace to the southwest and the Trøndelag Platform to the East. The Omega horst had only a minor structural closure of 10-20 m, but assuming scaling capacity of a fault, a stratigraphic closure would exist both up-dip and further down-dip of the structural closure. The fault was prognosed with a maximum throw of 140 m on top Ror Formation level. The main objective of the well was to test the hydrocarbon and reservoir -potential of sandstones of the Middle/Early Jurassic Fangst Group supposed to be present on the downthrown eastern side of the fault. None of the nearby correlation wells penetrated highly over pressured formations. Shallow gas warnings were given for three levels in the interval 518 to 960 m.

Operations and results

Wildcat well 6507/8-5 was spudded with the semi-submersible installation Ross Rig on 3 March 1991 and drilled to TD at 2000 m MD in the Early Jurassic Tilje Formation. The well was drilled in 13 days without major problems. However, while drilling 9 7/8" pilot hole at 854 m shallow gas was encountered. The well was plugged back and a 13 3/8" casing was set above the gas. The well was drilled with seawater and hi-vis pills down to 818 m and with Gyp/PAC mud from 818 m to TD.

Six meter of the Late Cretaceous Shetland Group was encountered at 1781 m; otherwise the Cretaceous section was absent in the well. Three meter of Spekk was penetrated at 1787 m. It was described as silty carbonaceous claystone with traces of coal fragments. The potential reservoir sands of the Fangst and Båt Groups were penetrated but proved not to be hydrocarbon bearing. No shows were recorded in any section of the well, not even in the claystone of the Spekk Formation. One conventional core was cut in the interval 1856.7 m to 1884.5 m in the Not/Ile Formations. A total of 60 sidewall cores were attempted; 60 were recovered. No Fluid samples were taken. The well was permanently abandoned on 16 March 1991 at as a dry well.

Testing

No drill stem test was performed

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Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
860.00	2000.00

Cuttings available for sampling?	YES

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	1857.7	1879.3	[m]

Total core sample length [m]	21.6
Cores available for sampling?	YES

Core photos

1857-1862m

1862-1867m

1867-1872m

1872-1877m

1877-1879m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1354.0	[m]	SWC	STATO
1430.0	[m]	SWC	STATO
1490.0	[m]	SWC	STATO
1500.0	[m]	DC	STRAT
1520.0	[m]	DC	STRAT
1540.0	[m]	SWC	STATO
1553.0	[m]	SWC	STATO
1560.0	[m]	DC	STRAT
1578.0	[m]	SWC	STATO
1590.0	[m]	DC	STRAT
1600.0	[m]	SWC	STATO
1620.0	[m]	DC	STRAT
1635.0	[m]	SWC	STATO
1648.0	[m]	SWC	STATO
1653.0	[m]	SWC	STATO
1661.0	[m]	SWC	STATO
1670.0	[m]	DC	STRAT
1680.0	[m]	DC	STRAT
1705.0	[m]	SWC	STATO
1775.0	[m]	SWC	STATO

1788.0	[m]	SWC	STATO
1800.0	[m]	DC	STRAT
1803.0	[m]	SWC	STATO
1809.0	[m]	DC	STRAT
1818.0	[m]	DC	STRAT
1824.0	[m]	DC	STRAT
1827.0	[m]	SWC	STATO
1836.0	[m]	DC	STRAT
1860.0	[m]	DC	STRAT
1866.0	[m]	DC	STRAT
1872.0	[m]	DC	STRAT
1878.0	[m]	DC	STRAT
1884.0	[m]	DC	STRAT
1889.0	[m]	SWC	STATO
1895.0	[m]	SWC	STATO
1898.0	[m]	SWC	STATO
1900.0	[m]	SWC	STATO
1902.0	[m]	SWC	STATO
1908.0	[m]	DC	STRAT
1912.0	[m]	SWC	STATO
1917.0	[m]	DC	STRAT
1925.0	[m]	SWC	STATO
1929.0	[m]	DC	STRAT
1934.0	[m]	SWC	STATO
1935.0	[m]	DC	STRAT
1943.0	[m]	SWC	STATO
1945.0	[m]	SWC	STATO
1950.0	[m]	DC	STRAT
1956.0	[m]	DC	STRAT
1965.0	[m]	SWC	STATO
1985.0	[m]	SWC	STATO
1989.0	[m]	DC	STRAT
1995.0	[m]	DC	STRAT
2000.0	[m]	DC	STRAT

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
356	NORDLAND GP

356	NAUST FM
1348	KAI FM
1578	HORDALAND GP
1578	BRYGGE FM
1712	ROGALAND GP
1712	TARE FM
1750	TANG FM
1781	SHETLAND GP
1787	VIKING GP
1787	SPEKK FM
1790	MELKE FM
1827	FANGST GP
1827	GARN FM
1854	NOT FM
1864	ILE FM
1900	BÅT GP
1900	ROR FM
1943	TILJE FM

Composite logs

Document name	Document format	Document size [MB]
1749	pdf	0.23

Geochemical information

Document name	Document format	Document size [MB]
1749_1	pdf	1.32

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

Document name	Document format	Document size [MB]
1749_01_WDSS_General_Information	pdf	0.39
1749_02_WDSS_completion_log	pdf	0.13

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

Document name	Document format	Document size [MB]
1749_6507_8_5_COMPLETION_REPORT_AND_LOG	pdf	9.76

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CST	850	1985
LDL CNL GR CAL	809	1990
MWD - DPR	425	2000
PI LSS GR CAL	809	1990
VSP	400	1980

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	417.0	36	418.0	0.00	LOT
INTERM.	13 3/8	808.0	17 1/2	810.0	1.50	LOT
OPEN HOLE		2000.0	12 1/4	2000.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
402	1.03			WATER BASED	04.03.1991
422	1.03	9.0	13.0	WATER BASED	04.03.1991
562	1.20	7.0	9.5	WATER BASED	05.03.1991
823	1.10	11.0	4.5	WATER BASED	07.03.1991
849	1.03	16.0	6.5	WATER BASED	06.03.1991
849	1.03	16.0	6.5	WATER BASED	06.03.1991
854	1.03	16.0	6.5	WATER BASED	06.03.1991
854	1.10	11.0	4.5	WATER BASED	07.03.1991
1438	1.20	24.0	5.5	WATER BASED	11.03.1991
1620	1.26	17.0	4.0	WATER BASED	11.03.1991

1620	1.26	18.0	4.0	WATER BASED	13.03.1991
1620	1.26	18.0	4.5	WATER BASED	14.03.1991
1620	1.27			DUMMY	18.03.1991
1824	1.27	17.0	4.0	WATER BASED	11.03.1991
1885	1.27	18.0	4.0	WATER BASED	13.03.1991
2000	1.27			DUMMY	18.03.1991
2000	1.27	18.0	4.5	WATER BASED	14.03.1991