General information

Wellbore name	6507/8-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6507/8-3
Seismic location	ST 8102 - 806 SP 770
Production licence	124
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	587-L
Drilling facility	WEST DELTA
Drilling days	18
Entered date	03.09.1988
Completed date	20.09.1988
Release date	20.09.1990
Publication date	08.03.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS SHOWS
Discovery wellbore	NO
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	GARN FM
Kelly bushing elevation [m]	29.0
Water depth [m]	309.0
Total depth (MD) [m RKB]	2075.0
Final vertical depth (TVD) [m RKB]	2075.0
Maximum inclination [°]	2.9
Bottom hole temperature [°C]	62
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	ÅRE FM
Geodetic datum	ED50
NS degrees	65° 27' 34.61'' N
EW degrees	7° 38' 29.29'' E
NS UTM [m]	7260540.88
EW UTM [m]	437039.71
UTM zone	32
NPDID wellbore	1309

Wellbore history

General

Well 6507/8-3 was the third in the block, located on the Sør High northeast of the Heidrun Field. The hole was drilled on the alpha-structure, a rotated fault block dipping towards south and west. Jurassic and parts of Triassic is probably eroded. The primary objective of the well was to test the hydrocarbon bearing potential of the previously undrilled alpha structure. The secondary objective was to verify geological model and structural interpretation, to drill the third commitment well in the block, to improve the paleontological, geological and geochemical understanding of the area. Planned TD was in Triassic sediments.

Operations and results

Wildcat well 6507/8-3 was spudded with Smedvig Drilling semi-submersible installation West Delta on 3 September 1988 and drilled to TD at 2075 m in Triassic rocks of the Åre Formation. The well was drilled with spud mud down to 558 m, with CMC from 558 m to 1101 m, and with gel/CMC/Ligno from 1101 m to TD. There was no shallow gas. The whole operation went very fast and without problems of any kind and TD was reached in 11 days.

Both the Eocene to Miocene and the Cretaceous are missing in the well. Top reservoir (Garn Formation) was encountered at 1358 m. It contained a small amount of gas with a gas/water contact at 1362 m. FMT testing at 1361 m showed dry gas consisting of 99% methane, interpreted to be of biogenic origin. Apart from this methane the well was found to be dry based on cuttings, cores, and logs. Two cores were cut in the well. Core 1 was cut between 1367 ? 1380 m (only the lower 1.5 m from the Not Formation recovered) and core 2 in the interval 1396 -1408 m in the Ile/Ror Formations.

The well was plugged and abandoned completed 20 September 1988 at as dry.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
560.00	2075.00

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	1378.9	1380.0	[m]
2	1395.0	1406.8	[m]

Total core sample length [m]	12.9
Cores available for sampling?	YES

Core photos


1378-1380m


1396-1401m


1401-1406m


1406-1407m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1250.0	[m]	DC	STRAT
1260.0	[m]	DC	STRAT
1275.0	[m]	SWC	STRAT
1288.0	[m]	SWC	STRAT
1299.0	[m]	DC	STRAT
1308.0	[m]	DC	STRAT
1326.0	[m]	DC	STRAT
1332.0	[m]	DC	STRAT
1350.0	[m]	DC	STRAT
1355.0	[m]	SWC	STRAT
1362.0	[m]	DC	STRAT
1363.0	[m]	SWC	STRAT
1371.0	[m]	DC	STRAT
1380.0	[m]	DC	STRAT
1396.0	[m]	C	STRAT
1398.8	[m]	C	STRAT
1402.5	[m]	C	STRAT
1405.9	[m]	C	STRAT
1406.8	[m]	C	STRAT
1419.0	[m]	DC	STRAT
1431.0	[m]	DC	STRAT
1437.0	[m]	DC	STRAT

1443.0	[m]	DC	STRAT
1445.0	[m]	SWC	STRAT
1449.0	[m]	DC	STRAT
1455.0	[m]	DC	STRAT
1461.0	[m]	DC	STRAT
1467.0	[m]	DC	STRAT
1473.0	[m]	DC	STRAT
1479.0	[m]	DC	STRAT
1485.0	[m]	DC	STRAT
1491.0	[m]	DC	STRAT
1512.0	[m]	DC	STRAT
1530.0	[m]	DC	STRAT
1545.0	[m]	SWC	STRAT
1566.0	[m]	DC	STRAT
1584.0	[m]	DC	STRAT
1620.0	[m]	SWC	STRAT
1632.0	[m]	DC	STRAT
1644.0	[m]	DC	STRAT
1656.0	[m]	DC	STRAT
1668.0	[m]	DC	STRAT
1677.0	[m]	SWC	STRAT
1680.0	[m]	DC	STRAT
1716.0	[m]	DC	STRAT
1728.0	[m]	DC	STRAT
1740.0	[m]	DC	STRAT
1750.0	[m]	SWC	STRAT
1764.0	[m]	DC	STRAT
1776.0	[m]	DC	STRAT
1788.0	[m]	DC	STRAT
1808.0	[m]	SWC	STRAT
1824.0	[m]	DC	STRAT
1836.0	[m]	DC	STRAT
1848.0	[m]	DC	STRAT
1860.0	[m]	DC	STRAT
1872.0	[m]	DC	STRAT
1875.0	[m]	SWC	STRAT
1884.0	[m]	DC	STRAT
1896.0	[m]	DC	STRAT
1908.0	[m]	DC	STRAT
1915.0	[m]	SWC	STRAT

1932.0	[m]	DC	STRAT
1944.0	[m]	DC	STRAT
1956.0	[m]	DC	STRAT
1968.0	[m]	DC	STRAT
1975.0	[m]	SWC	STRAT
1992.0	[m]	DC	STRAT
2006.0	[m]	DC	STRAT
2016.0	[m]	DC	STRAT
2026.0	[m]	SWC	STRAT
2040.0	[m]	DC	STRAT
2052.0	[m]	DC	STRAT
2064.0	[m]	DC	STRAT
2075.0	[m]	DC	STRAT

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
338	NORDLAND GP
338	NAUST FM
1245	KAI FM
1334	ROGALAND GP
1334	TARE FM
1353	VIKING GP
1353	MELKE FM
1358	FANGST GP
1358	GARN FM
1379	NOT FM
1386	ILE FM
1402	BÅT GP
1402	ROR FM
1446	TILJE FM
1542	ÅRE FM

Composite logs

Document name	Document format	Document size [MB]
1309	pdf	0.30

Geochemical information

Document name	Document format	Document size [MB]
1309_1	pdf	0.48

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

Document name	Document format	Document size [MB]
1309_01_WDSS_General_Information	pdf	0.20
1309_02_WDSS_completion_log	pdf	0.17

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

Document name	Document format	Document size [MB]
1309_6507_8_3_COMPLETION_REPORT_AND_LOG	pdf	12.28

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL GR	338	1085
CDL CN GR	1085	2071
DIFL ACL GR CDL	325	945
DIFL BHC GR	1085	2074
DIPLOG	1085	2073
FMT	1361	1361
FMT	1368	1395
MWD - GR RES DIR	397	2072
RSCT	1163	2026
SWC	1235	2026
VSP	480	2070

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	399.0	36	567.0	0.00	LOT
SURF.COND.	20	552.0	26	722.0	1.25	LOT
INTERM.	13 3/8	1086.0	17 1/2	1100.0	1.83	LOT
OPEN HOLE		2075.0	12 1/4	2075.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
557	1.15	11.0	3.0	WATER BASED	07.09.1988
557	1.15	7.0	4.0	WATER BASED	08.09.1988
1100	1.16	9.0	3.0	WATER BASED	09.09.1988
1100	1.15	9.0	3.0	WATER BASED	12.09.1988
1300	1.20	10.0	7.0	WATER BASED	12.09.1988
1300	1.21	14.0	5.0	WATER BASED	12.09.1988
1300	1.20	15.0	3.0	WATER BASED	13.09.1988
1300	1.21	20.0	6.0	WATER BASED	14.09.1988
1300	1.21	17.0	7.0	WATER BASED	16.09.1988
2075	1.20	17.0	7.0	WATER BASED	16.09.1988

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]
1309_Formation_pressure_(Formasjonstrykk)	pdf	0.24