General information

Wellbore name	6204/11-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Discovery	6204/11-1
Well name	6204/11-1
Seismic location	ST 9202- IN-LINE 222 & CDP 497
Production licence	175
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	795-L
Drilling facility	DEEPSEA BERGEN
Drilling days	34
Entered date	12.10.1994
Completed date	14.11.1994
Release date	14.11.1996
Publication date	29.05.2002
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	YES
1st level with HC, age	LATE CRETACEOUS
1st level with HC, formation	NO FORMAL NAME
2nd level with HC, age	LATE JURASSIC
2nd level with HC, formation	INTRA HEATHER FM SS
Kelly bushing elevation [m]	23.0
Water depth [m]	199.0
Total depth (MD) [m RKB]	2966.0
Final vertical depth (TVD) [m RKB]	2961.6
Maximum inclination [°]	13
Bottom hole temperature [°C]	83
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	GREY BEDS (INFORMAL)
Geodetic datum	ED50
NS degrees	62° 11' 16.96'' N
EW degrees	4° 23' 57.85'' E
NS UTM [m]	6896081.78

EW UTM [m]	572844.35
UTM zone	31
NPDID wellbore	2205

Wellbore history

General

The main objectives for well 6204/11-1 was to test commercial reserves of hydrocarbons in sandstones of Middle Jurassic age and in sandstones of Turonian age. A secondary objective was to test the play concept and possibly prove hydrocarbons in an Upper Jurassic sandstone.

Operations and results

Well 6204/11-1 was spudded on 10 October 1994 with the semi-submersible rig "Deepsea Bergen" and drilled to 2966 m in the Triassic Grey Beds. The 30", 20" and 13 3/8" casings strings were successfully set. The 9 5/8" casing was planned but left out. The 12 1/4" hole was drilled using a packed bottom hole assembly. The vertical hole was obtained at high weight on bit and reduced bottom hole assembly failures due to shock / vibration effects. No drilling problems were encountered. The well was drilled with pre-hydrated bentonite (PHB) to 540 m, and KCl polymer mud from there to TD.

The well proved, with some exception, the geological model. Sandstones of both Upper and Middle Jurassic age were encountered. The well was however terminated in Triassic sediments not in the basement as prognosed.
The well proved hydrocarbons with low saturation from 2029 to 2046 m in sandstone of Turonian age. The top of the Jurassic prospect was penetrated 23 m deeper than prognosed and proved to be gas bearing. The gas-water contact was found at 2792.5 m TVD RKB (2769.5 m TVD MSL). Good oil shows were observed in the cores below the gas-water contact and measurements from the cores indicate immature oil with low saturation below the gas - water contact.

Six cores were cut, three in the Cretaceous and three in the Jurassic. FMT and RCI wire line samples were taken at 1938 m (gas and mud filtrate), 2032.5 m (mud filtrate and small amounts of oil), 2043.8 m (mud, mud filtrate, and oil film), and 2787 m (mud filtrate and gas).

The well was plugged and abandoned on 14 November 1994 as as a gas discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
545.00	2964.00

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	2008.0	2016.0	[m]
2	2016.0	2025.8	[m]
3	2133.0	2158.3	[m]
4	2778.0	2793.0	[m]
5	2793.5	2818.2	[m]
6	2818.2	2846.0	[m]

Total core sample length [m]	110.6
Cores available for sampling?	YES

Core photos


2008-2013m


2013-2026m


2026-2021m


2021-2025m


2133-2138m


2138-2143m


2143-2148m


2148-2153m


2153-2158m


2158-2159m


2778-2783m


2783-2788m


2788-2793m


2793-2794m


2794-2798m











2798-2803m 2803-2808m 2808-2813m 2813-2818m 2818-2819m


2818-2823m

2823-2828m

2828-2833m

2833-2838m

2838-2843m


2843-2846m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
650.0	[m]	DC	RRI
675.0	[m]	DC	RRI
690.0	[m]	DC	RRI
710.0	[m]	DC	RRI
725.0	[m]	DC	RRI
740.0	[m]	DC	RRI
760.0	[m]	DC	RRI
766.0	[m]	DC	RRI
770.0	[m]	DC	STATO
790.0	[m]	DC	RRI
810.0	[m]	DC	RRI
830.0	[m]	DC	RRI
840.0	[m]	DC	RRI
853.0	[m]	SWC	STATO
870.0	[m]	SWC	STATO
880.0	[m]	DC	RRI
900.0	[m]	DC	RRI
920.0	[m]	DC	RRI
935.0	[m]	DC	RRI
943.0	[m]	SWC	STATO
960.0	[m]	DC	RRI

975.0	[m]	DC	RRI
990.0	[m]	DC	RRI
1005.0	[m]	DC	RRI
1010.0	[m]	SWC	STATO
1025.0	[m]	DC	RRI
1040.0	[m]	DC	RRI
1055.0	[m]	DC	RRI
1072.0	[m]	SWC	STATO
1085.0	[m]	DC	RRI
1104.0	[m]	SWC	STATO
1111.0	[m]	SWC	STATO
1120.0	[m]	DC	RRI
1130.0	[m]	DC	RRI
1140.0	[m]	DC	RRI
1155.0	[m]	DC	RRI
1170.0	[m]	DC	RRI
1180.0	[m]	DC	RRI
1190.0	[m]	DC	RRI
1200.0	[m]	DC	RRI
1210.0	[m]	DC	RRI
1220.0	[m]	DC	RRI
1230.0	[m]	DC	RRI
1240.0	[m]	DC	RRI
1250.0	[m]	DC	RRI
1265.0	[m]	DC	RRI
1275.0	[m]	DC	RRI
1295.0	[m]	DC	RRI
1305.0	[m]	DC	RRI
1310.0	[m]	DC	RRI
1320.0	[m]	DC	RRI
1330.0	[m]	DC	RRI
1340.0	[m]	DC	RRI
1350.0	[m]	DC	RRI
1360.0	[m]	DC	RRI
1370.0	[m]	DC	RRI
1380.0	[m]	DC	RRI
1395.0	[m]	DC	RRI
1400.0	[m]	DC	RRI
1410.0	[m]	DC	RRI
1420.0	[m]	DC	RRI

1430.0	[m]	DC	RRI
1440.0	[m]	DC	RRI
1450.0	[m]	DC	RRI
1453.0	[m]	DC	RRI
1460.0	[m]	DC	RRI
1470.0	[m]	DC	RRI
1480.0	[m]	DC	RRI
1490.0	[m]	DC	RRI
1517.0	[m]	DC	STATOIL
1530.0	[m]	DC	RRI
1545.0	[m]	DC	RRI
1560.0	[m]	DC	RRI
1575.0	[m]	DC	RRI
1590.0	[m]	DC	RRI
1600.0	[m]	DC	RRI
1605.0	[m]	SWC	STATO
1620.0	[m]	DC	RRI
1635.0	[m]	DC	RRI
1650.0	[m]	DC	RRI
1665.0	[m]	DC	RRI
1680.0	[m]	SWC	STATO
1695.0	[m]	DC	RRI
1710.0	[m]	DC	RRI
1725.0	[m]	DC	RRI
1740.0	[m]	DC	RRI
1770.0	[m]	DC	RRI
1785.0	[m]	DC	RRI
1800.0	[m]	DC	RRI
1815.0	[m]	DC	RRI
1830.0	[m]	DC	RRI
1845.0	[m]	DC	RRI
1860.0	[m]	DC	RRI
1867.0	[m]	SWC	STATO
1887.0	[m]	DC	RRI
1900.0	[m]	SWC	STATO
1911.0	[m]	SWC	STATO
1920.5	[m]	SWC	STATO
1935.0	[m]	SWC	RRI
1950.0	[m]	DC	RRI
1965.0	[m]	DC	RRI

1978.0	[m]	SWC	STATO
1995.0	[m]	DC	RRI
2008.2	[m]	DC	RRI
2010.8	[m]	C	RRI
2014.0	[m]	C	RRI
2016.9	[m]	C	RRI
2020.0	[m]	C	RRI
2022.7	[m]	C	RRI
2034.0	[m]	DC	RRI
2040.0	[m]	DC	RRI
2046.0	[m]	DC	RRI
2055.0	[m]	SWC	STATO
2058.0	[m]	DC	RRI
2064.0	[m]	DC	RRI
2070.0	[m]	DC	RRI
2079.0	[m]	DC	RRI
2084.0	[m]	SWC	STATO
2093.0	[m]	SWC	STATO
2100.0	[m]	DC	RRI
2106.0	[m]	DC	RRI
2110.0	[m]	SWC	STATO
2118.0	[m]	DC	RRI
2130.0	[m]	DC	RRI
2133.7	[m]	C	RRI
2136.8	[m]	C	RRI
2139.9	[m]	C	RRI
2142.3	[m]	C	RRI
2145.4	[m]	DC	RRI
2145.4	[m]	C	RRI
2148.3	[m]	C	RRI
2151.6	[m]	C	RRI
2154.7	[m]	C	RRI
2157.7	[m]	C	RRI
2166.0	[m]	DC	RRI
2172.0	[m]	DC	RRI
2178.0	[m]	DC	RRI
2190.0	[m]	SWC	STATO
2196.0	[m]	DC	RRI
2202.0	[m]	DC	RRI
2214.0	[m]	DC	RRI

2217.0	[m]	DC	RRI
2223.0	[m]	DC	RRI
2229.0	[m]	DC	RRI
2238.0	[m]	DC	RRI
2244.0	[m]	DC	RRI
2253.0	[m]	DC	RRI
2259.0	[m]	DC	RRI
2265.0	[m]	DC	RRI
2271.0	[m]	DC	RRI
2277.0	[m]	DC	RRI
2284.0	[m]	SWC	STATO
2293.0	[m]	SWC	STATO
2298.0	[m]	DC	RRI
2304.0	[m]	DC	RRI
2310.0	[m]	DC	RRI
2316.0	[m]	DC	RRI
2322.0	[m]	DC	RRI
2328.0	[m]	DC	RRI
2340.0	[m]	DC	RRI
2346.0	[m]	DC	RRI
2352.0	[m]	DC	RRI
2358.0	[m]	DC	RRI
2370.0	[m]	DC	RRI
2379.0	[m]	DC	RRI
2391.0	[m]	DC	RRI
2403.0	[m]	DC	RRI
2410.0	[m]	SWC	STATO
2415.0	[m]	DC	RRI
2419.5	[m]	SWC	STATO
2433.0	[m]	DC	RRI
2435.0	[m]	SWC	STATO
2443.0	[m]	DC	RRI
2445.0	[m]	SWC	STATO
2448.0	[m]	DC	RRI
2454.0	[m]	DC	RRI
2460.0	[m]	DC	RRI
2469.0	[m]	DC	RRI
2476.5	[m]	DC	STATO
2481.0	[m]	DC	RRI
2490.0	[m]	DC	RRI

2497.0	[m]	SWC	STATO
2505.0	[m]	DC	RRI
2514.0	[m]	DC	RRI
2520.0	[m]	DC	RRI
2526.0	[m]	DC	RRI
2533.0	[m]	SWC	STATO
2541.0	[m]	DC	RRI
2546.5	[m]	SWC	STATO
2550.0	[m]	DC	RRI
2568.0	[m]	DC	RRI
2577.0	[m]	DC	RRI
2584.0	[m]	SWC	STATO
2589.0	[m]	DC	RRI
2596.0	[m]	SWC	STATO
2604.0	[m]	DC	RRI
2610.0	[m]	SWC	STATO
2619.0	[m]	DC	RRI
2625.0	[m]	DC	RRI
2633.0	[m]	SWC	STATO
2640.0	[m]	DC	RRI
2646.0	[m]	DC	RRI
2652.0	[m]	DC	RRI
2661.0	[m]	DC	RRI
2670.0	[m]	DC	RRI
2679.0	[m]	DC	RRI
2685.0	[m]	DC	RRI
2694.0	[m]	SWC	STATO
2703.0	[m]	DC	RRI
2709.0	[m]	DC	RRI
2714.0	[m]	SWC	STATO
2721.0	[m]	DC	RRI
2739.0	[m]	DC	RRI
2748.0	[m]	DC	RRI
2754.0	[m]	DC	RRI
2760.0	[m]	DC	RRI
2766.0	[m]	DC	RRI
2770.0	[m]	SWC	STATO
2775.0	[m]	DC	RRI
2778.5	[m]	DC	RRI
2780.0	[m]	SWC	STATO

2784.7	[m]	C	RRI
2802.7	[m]	C	RRI
2814.6	[m]	C	RRI
2838.7	[m]	C	RRI
2847.0	[m]	DC	RRI
2850.0	[m]	DC	RRI
2853.0	[m]	DC	RRI
2856.0	[m]	DC	RRI
2859.0	[m]	DC	RRI
2865.0	[m]	DC	RRI
2871.0	[m]	DC	RRI
2880.0	[m]	DC	RRI
2880.0	[m]	SWC	STATO
2886.0	[m]	DC	RRI
2892.0	[m]	DC	RRI
2901.0	[m]	DC	RRI
2903.0	[m]	SWC	STATO
2910.0	[m]	DC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
222	NORDLAND GP
635	HORDALAND GP
750	ROGALAND GP
750	UNDIFFERENTIATED
1115	EGGA FM (INFORMAL)
1318	SHETLAND GP
1318	KYRRE FM
2001	NO FORMAL NAME
2088	KYRRE FM
2407	BLODØKS FM
2422	SVARTE FM
2602	VIKING GP
2602	HEATHER FM
2772	INTRA HEATHER FM SS
2846	NO FORMAL NAME
2916	GREY BEDS (INFORMAL)

Composite logs

Document name	Document format	Document size [MB]
2205	pdf	0.44

Geochemical information

Document name	Document format	Document size [MB]
2205_1	pdf	1.66
2205_2	pdf	1.18

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

Document name	Document format	Document size [MB]
2205_6204_11_1_COMPLETION_REPORT_AND_LOG	pdf	27.65

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DLL DAC ZDL CNL SL	527	2971
FMT QDYNE CHT GR	1938	2880
FMT QDYNE CHT GR SAMPLE	1938	2051
HRDIP	1815	2950
MWD RGD	286	2008
MWD RGD	2158	2966
SWC GR	564	1805
SWC GR	1836	2445
SWC GR	2363	2965
VSP	400	2965

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	283.0	36	285.0	0.00	LOT
INTERM.	20	528.0	26	530.0	1.34	LOT
INTERM.	13 3/8	1812.0	17 1/2	1830.0	1.58	LOT
OPEN HOLE		2966.0	12 1/4	2966.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
382	1.03			WATER BASED	04.11.1994
540	1.03	31.0	17.0	WATER BASED	04.11.1994
540	1.03	26.0	14.5	WATER BASED	04.11.1994
820	1.07	17.0	9.0	WATER BASED	04.11.1994
1375	1.13	21.0	14.0	WATER BASED	04.11.1994
1712	1.27	27.0	10.5	WATER BASED	11.11.1994
1830	1.18	22.0	15.0	WATER BASED	04.11.1994
1830	1.22	22.0	14.5	WATER BASED	04.11.1994
1975	1.21	18.0	14.0	WATER BASED	04.11.1994
2015	1.20	22.0	13.5	WATER BASED	28.10.1994
2044	1.27	28.0	10.5	WATER BASED	09.11.1994
2065	1.27	28.0	14.0	WATER BASED	31.10.1994
2065	1.27	27.0	13.5	WATER BASED	31.10.1994
2154	1.27	27.0	13.0	WATER BASED	31.10.1994
2194	1.27	27.0	13.5	WATER BASED	31.10.1994
2638	1.26	28.0	14.0	WATER BASED	01.11.1994
2680	1.27	18.0	8.0	WATER BASED	11.11.1994
2778	1.26	29.0	13.5	WATER BASED	03.11.1994
2787	1.27	28.0	10.5	WATER BASED	09.11.1994
2818	1.26	29.0	13.5	WATER BASED	03.11.1994
2846	1.26	28.0	12.5	WATER BASED	04.11.1994
2877	1.27	28.0	10.5	WATER BASED	09.11.1994
2877	1.27	28.0	10.5	WATER BASED	11.11.1994
2966	1.26	29.0	11.5	WATER BASED	07.11.1994
2966	1.27	28.0	10.5	WATER BASED	07.11.1994
2966	1.27	29.0	12.0	WATER BASED	07.11.1994

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]
2205_Formation_pressure_(Formasjonstrykk)	pdf	0.28