

**General information**

Wellbore name	34/8-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	VISUND
Discovery	34/8-1 Visund
Well name	34/8-1
Seismic location	NH 8404 - 221 SP. 215
Production licence	120
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	488-L
Drilling facility	TREASURE SCOUT
Drilling days	118
Entered date	11.11.1985
Completed date	08.03.1986
Release date	08.03.1988
Publication date	28.05.2003
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	BRENT GP
Kelly bushing elevation [m]	23.0
Water depth [m]	325.5
Total depth (MD) [m RKB]	3610.0
Final vertical depth (TVD) [m RKB]	3577.0
Maximum inclination [°]	13.4
Bottom hole temperature [°C]	131
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	LUNDE FM
Geodetic datum	ED50
NS degrees	61° 21' 53.5" N
EW degrees	2° 25' 57.57" E
NS UTM [m]	6803722.25
EW UTM [m]	469666.18



UTM zone	31
NPDID wellbore	854

Wellbore history

General

Well 34/8-1 was drilled on the main prospect "A" in the block. A main rotated fault block flanking the Viking Graben defines the prospect. The closure of the prospect was mainly dependant upon a sealing fault separating the prospect from the structurally higher Gullfaks area. The main objectives of the well were to prove possible hydrocarbon accumulations in the structurally and stratigraphically highest reservoir zone (the Brent Group) in an optimal position, to verify the interpretation regarding the stratigraphic and structural evolution, and to drill in a position that tested both the structural closure and the sealing fault on the "A" prospect.

Secondary objectives of the well were to test the hydrocarbon potential, the stratigraphy and the reservoir quality in the Cook, Statfjord, and upper Lunde Formations; to drill in a position where the Brent Group showed no or minor erosion; and to drill in a position which left small quantities of hydrocarbons untested up dip in the Brent Group. The prognosed depth was 3750 m, ca 100 m into sands of the upper Lunde Formation.

Operations and results

Wildcat well 34/8-1 was spudded with the semi-submersible installation "Treasure Scout" 11 November 1985 and drilled to a total depth of 3610 m in the Triassic Lunde Formation. Certain problems were experienced in the beginning, and the well had to be re-spudded. After this drilling proceeded without significant problems. The well was drilled with sea water and hi-vis pills down to 925 m and with KCl polymer mud from 925 m to TD. The well penetrated a near complete Brent Group. The reservoir top came in at 2767 m, approx. 80 a higher than prognosed. Logs and RFT data show that it is a probability of gas down to 2854 and the oil/water contact is at 2864 m. Thirteen cores were cut in the well, 10 cores in the Brent Group, one in the Cook Formation, and one in the Lunde Formation. Two sets of segregated RFT samples were retrieved from 2852.5 m and 2858 m, in the gas zone and one in the oil zone respectively.

The well was plugged and abandoned on 8 March 1986 as an oil and gas discovery.

Testing

Three drill stem tests were performed in the well, DST 1 in the water zone, DST 2 in the oil zone and DST 3 in the gas zone. DST 2 experienced gas coning which could indicate that the oil is difficult to produce.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
430.00	3610.00

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	2768.0	2793.8	[m]
2	2794.0	2821.9	[m]
3	2822.0	2830.8	[m]
4	2839.5	2853.0	[m]
5	2854.0	2882.0	[m]
6	2882.0	2892.2	[m]
7	2894.0	2920.0	[m]
8	2920.0	2928.2	[m]
9	2929.0	2947.7	[m]
10	2947.7	2974.7	[m]
11	3044.0	3064.6	[m]
12	3294.0	3316.1	[m]
13	3512.0	3520.6	[m]

Total core sample length [m]	245.3
Cores available for sampling?	YES

Core photos

2768-2774m



2774-2780m



2780-2786m



2786-2792m



2792-2794m



2794-3000m



2800-2806m



2806-2812m



2812-2818m



2818-2822m



2822-2828m



2828-2831m



2840-2845m



2845-2851m



2851-2853m



2854-2860m



2860-2867m



2866-2872m



2872-2878m



2878-2882m



2882-2888m



2888-2893m



2894-2900m



2900-2906m



2906-2912m



2912-2918m



2918-2920m



2920-2925m



2926-2929m



2929-2935m



2935-2941m



2941-2947m



2947-2950m



2947-2953m



2953-2959m



2959-2965m



2965-2971m



2971-2975m



3062-3065m



3044-3050m



3050-3056m



3056-3062m



3294-3300m



3300-3306m



3306-3312m



3312-3316m



3512-3518m



3518-3521m

Oil samples at the Norwegian Offshore Directorate

Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
DST	DST1	2880.00	2900.00		18.02.1986 - 00:00	YES
DST	DST2	2811.40	2814.40	OIL	24.02.1986 - 00:00	YES
DST	DST3	2726.80	2765.20	CONDE NSATE	01.03.1986 - 00:00	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
349	NORDLAND GP
1090	UTSIRA FM
1136	HORDALAND GP
1826	ROGALAND GP
1826	BALDER FM
1874	LISTA FM
2006	SHETLAND GP
2761	CROMER KNOLL GP
2764	VIKING GP
2764	DRAUPNE FM
2765	HEATHER FM



2767	BRENT GP
2767	TARBERT FM
2803	NESS FM
2851	ETIVE FM
2900	RANNOCH FM
2980	BROOM FM
2981	DUNLIN GP
2981	DRAKE FM
3044	COOK FM
3163	BURTON FM
3198	AMUNDSEN FM
3324	STATFJORD GP
3417	HEGRE GP
3417	LUNDE FM

Composite logs

Document name	Document format	Document size [MB]
854	pdf	0.58

Geochemical information

Document name	Document format	Document size [MB]
854_1	pdf	1.87
854_2	pdf	1.91
854_3	pdf	1.62
854_4	pdf	1.76

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

Document name	Document format	Document size [MB]
854_01_WDSS_General_Information	pdf	0.31
854_02_WDSS_completion_log	pdf	0.31



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

Document name	Document format	Document size [MB]
854 34 8 1 COMPLETION REPORT AND LOG	pdf	47.20

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	2880	2900	11.1
2.0	2845	2857	9.5
3.0	2768	2807	19.0

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0			42.200	106
2.0			41.600	105
3.0			41.400	102

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0		2400		0.620	3
2.0	429	248000	0.834	0.660	579
3.0	447	952110	0.745	0.670	2130

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL	100	2739
CBL VDL	745	1750
CST	454	920
CST	1015	1724
CST	1778	2367
CST	2400	3592
DLL MSFL CAL GR	2720	2916
DLWD - GR SNRES	1800	3610
ISF LSS MSFL SP GR	2379	2918





ISF LSS SP GR	437	928
ISF LSS SP GR	903	1747
ISF LSS SP GR	1754	2373
ISF LSS SP GR	2733	3609
LDL CAL GR	903	1747
LDL CNL NGT CAL	2379	2919
LDL CNL NGT CAL	2767	3611
LDT CNL CAL GR	1754	2374
RFT	2768	2817
RFT	2768	2993
RFT	2843	2865
RFT	2865	3051
RFT	2865	3600
RFT SAMPLE	2852	2852
RFT SAMPLE	2858	2858
SHDT GR	1754	2374
SHDT GR	2379	3611
VSP	100	3595

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	437.0	36	438.0	0.00	LOT
SURF.COND.	20	903.0	26	1554.0	1.64	LOT
INTERM.	13 3/8	1754.0	17 1/2	1770.0	1.74	LOT
INTERM.	9 5/8	2379.0	12 1/4	2398.0	1.82	LOT
LINER	7	3610.0	8 1/2	3610.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
438	1.05	12.0	20.0	WATER BASED	10.11.1985
438	1.24	14.0	20.0	WATER BASED	12.11.1985
438	1.05	9.0	14.0	WATER BASED	13.11.1985
438	1.05	10.0	18.0	WATER BASED	10.11.1985
569	1.08	8.0	21.0	WATER BASED	18.11.1985
925	1.12	8.0	25.0	WATER BASED	18.11.1985



925	1.11	8.0	16.0	WATER BASED	18.11.1985
925	1.15	7.0	16.0	WATER BASED	18.11.1985
925	1.11	8.0	16.0	WATER BASED	18.11.1985
935	1.21	7.0	19.0	WATER BASED	19.11.1985
935	1.23	7.0	17.0	WATER BASED	20.11.1985
935	1.21	12.0	14.0	WATER BASED	24.11.1985
938	1.15	17.0	13.0	WATER BASED	24.11.1985
1189	1.18	16.0	12.0	WATER BASED	24.11.1985
1554	1.16	18.0	14.0	WATER BASED	26.11.1985
1770	1.20	18.0	13.0	WATER BASED	27.11.1985
1770	1.20	16.0	11.0	WATER BASED	28.11.1985
1770	1.17	19.0	12.0	WATER BASED	26.11.1985
1773	1.20	16.0	10.0	WATER BASED	01.12.1985
1821	1.25	18.0	12.0	WATER BASED	01.12.1985
1929	1.25	20.0	12.0	WATER BASED	01.12.1985
2065	1.26	20.0	10.0	WATER BASED	04.12.1985
2121	1.32	20.0	9.0	WATER BASED	03.12.1985
2179	1.66	17.0	9.0	WATER BASED	04.03.1986
2267	1.40	21.0	8.0	WATER BASED	05.12.1985
2375	1.53	28.0	10.0	WATER BASED	08.12.1985
2395	1.53	28.0	9.0	WATER BASED	08.12.1985
2398	1.52	26.0	8.0	WATER BASED	10.12.1985
2461	1.52	28.0	7.0	WATER BASED	11.12.1985
2540	1.51	34.0	8.0	WATER BASED	15.12.1985
2655	1.51	23.0	7.0	WATER BASED	15.12.1985
2737	1.51	27.0	9.0	WATER BASED	15.12.1985
2765	1.55	12.0	2.0	WATER BASED	05.03.1986
2768	1.69	37.0	16.0	WATER BASED	15.12.1985
2787	1.70	18.0	10.0	WATER BASED	16.12.1985
2807	1.70	20.0	9.0	WATER BASED	03.03.1986
2822	1.69	22.0	7.0	WATER BASED	17.12.1985
2833	1.70	20.0	10.0	WATER BASED	18.12.1985
2850	1.70	20.0	9.0	WATER BASED	26.02.1986
2850	1.70	20.0	9.0	WATER BASED	27.02.1986
2854	1.66	20.0	9.0	WATER BASED	25.02.1986
2854	1.69	23.0	10.0	WATER BASED	22.12.1985
2856	1.66	20.0	9.0	WATER BASED	23.02.1986
2856	1.66	20.0	9.0	WATER BASED	24.02.1986
2874	1.66	20.0	9.0	WATER BASED	20.02.1986
2874	1.66	20.0	9.0	WATER BASED	23.02.1986



2894	1.69	20.0	9.0	WATER BASED	22.12.1985
2900	1.64	20.0	9.0	WATER BASED	17.02.1986
2900	1.66	20.0	9.0	WATER BASED	18.02.1986
2900	1.66	20.0	9.0	WATER BASED	19.02.1986
2920	1.69	20.0	9.0	WATER BASED	22.12.1985
2920	1.69	21.0	14.0	WATER BASED	29.12.1985
2920	1.69	20.0	10.0	WATER BASED	22.12.1985
2920	1.69	21.0	11.0	WATER BASED	23.12.1985
2920	1.69	22.0	10.0	WATER BASED	29.12.1985
2920	1.69	19.0	13.0	WATER BASED	29.12.1985
2920	1.69	18.0	11.0	WATER BASED	29.12.1985
2920	1.66	15.0	10.0	WATER BASED	29.12.1985
2920	1.66	18.0	9.0	WATER BASED	29.12.1985
2920	1.66	20.0	11.0	WATER BASED	30.12.1985
2947	1.66	17.0	11.0	WATER BASED	02.01.1986
2975	1.66	17.0	10.0	WATER BASED	02.01.1986
3014	1.66	20.0	12.0	WATER BASED	02.01.1986
3019	1.66	17.0	9.0	WATER BASED	12.02.1986
3019	1.66	14.0	8.0	WATER BASED	13.02.1986
3019	1.66	19.0	12.0	WATER BASED	10.02.1986
3019	1.66	20.0	9.0	WATER BASED	12.02.1986
3019	1.66	20.0	9.0	WATER BASED	17.02.1986
3021	1.66	21.0	7.0	WATER BASED	10.02.1986
3023	1.66	20.0	8.0	WATER BASED	10.02.1986
3035	1.66	20.0	8.0	WATER BASED	10.02.1986
3044	1.66	20.0	12.0	WATER BASED	05.01.1986
3065	1.66	29.0	9.0	WATER BASED	05.01.1986
3185	1.66	20.0	10.0	WATER BASED	05.01.1986
3247	1.66	22.0	9.0	WATER BASED	07.01.1986
3278	1.66	20.0	9.0	WATER BASED	07.01.1986
3318	1.66	20.0	9.0	WATER BASED	08.01.1986
3341	1.66	21.0	8.0	WATER BASED	09.01.1986
3344	1.66	20.0	9.0	WATER BASED	13.01.1986
3344	1.66	20.0	8.0	WATER BASED	13.01.1986
3344	1.66	20.0	8.0	WATER BASED	14.01.1986
3344	1.68	21.0	9.0	WATER BASED	15.01.1986
3351	1.66	20.0	9.0	WATER BASED	16.01.1986
3351	1.68	20.0	10.0	WATER BASED	19.01.1986
3351	1.67	20.0	8.0	WATER BASED	19.01.1986
3351	1.67	20.0	10.0	WATER BASED	20.01.1986



3352	1.68	24.0	10.0	WATER BASED	21.01.1986
3368	1.66	20.0	8.0	WATER BASED	22.01.1986
3455	1.66	21.0	9.0	WATER BASED	28.01.1986
3484	1.67	20.0	9.0	WATER BASED	28.01.1986
3512	1.66	21.0	10.0	WATER BASED	28.01.1986
3528	1.66	19.0	10.0	WATER BASED	28.01.1986
3610	1.66	20.0	15.0	WATER BASED	28.01.1986
3610	1.66	19.0	11.0	WATER BASED	28.01.1986
3610	1.66	22.0	11.0	WATER BASED	30.01.1986
3610	1.66	19.0	11.0	WATER BASED	30.01.1986
3610	1.66	18.0	9.0	WATER BASED	02.02.1986
3610	1.66	19.0	10.0	WATER BASED	03.02.1986
3610	1.66	19.0	10.0	WATER BASED	04.02.1986
3610	1.66	18.0	9.0	WATER BASED	06.02.1986
3610	1.66	21.0	11.0	WATER BASED	02.02.1986
3610	1.66	21.0	10.0	WATER BASED	02.02.1986
3885	1.56	12.0	2.0	WATER BASED	08.03.1986

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
2855.55	[m]
4292.92	[m]
4273.76	[m]
2879.35	[m]
3519.45	[m]
3514.55	[m]
3512.30	[m]
3308.17	[m]
3298.30	[m]
3057.70	[m]
3047.68	[m]
2954.70	[m]
2943.16	[m]
2925.65	[m]
2911.60	[m]
2900.50	[m]
2889.30	[m]
2851.57	[m]
2847.73	[m]



2825.30	[m]
2814.70	[m]
2799.48	[m]
2789.20	[m]
2768.00	[m]

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]
854_Formalion_pressure_(Formasjonstrykk)	pdf	0.23

