General information

Wellbore name	34/4-8
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	34/4-8
Seismic location	SG 8420-RE: ROW 455 & COLUMN 825
Production licence	057
Drilling operator	Saga Petroleum ASA
Drill permit	790-L
Drilling facility	VILDKAT EXPLORER
Drilling days	31
Entered date	22.05.1994
Completed date	21.06.1994
Release date	21.06.1996
Publication date	31.10.2003
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	363.0
Total depth (MD) [m RKB]	3110.0
Final vertical depth (TVD) [m RKB]	3108.5
Maximum inclination [°]	2.9
Bottom hole temperature [°C]	104
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	LUNDE FM
Geodetic datum	ED50
NS degrees	61° 35' 4.02'' N
EW degrees	2° 10' 9.73'' E
NS UTM [m]	6828333.19
EW UTM [m]	455901.06
UTM zone	31
NPDID wellbore	1908

Wellbore history

General

Well 34/4-8 is located on the "Beta Terrace", a down faulted terrace northwest of the Snorre Block in the central part of the block. The main objective of well 34/4-8 was to test the presence of hydrocarbons and the reservoir quality of the Statfjord Formation on the Beta Terrace. The well should also test the presence of hydrocarbons in the Lunde Formation, improve depth conversion and seismic tie for the pre-Cretaceous levels in this previously undrilled structural element, and give indications on further prospectivity north-westwards in block 34/4.

Operations and results

Wildcat well 34/4-8 was spudded with the semi-submersible installation "Vildkat Explorer" on 22 May 1994 and drilled to TD at 3110 m in the Triassic Lunde Formation. Since possible shallow gas levels had been predicted, a 9 7/8" pilot hole was first drilled. No shallow gas was found. The well was drilled with spud mud and gel down to 1460 me and with KCl mud with a glycol additive from 1460 m to TD.

The Nordland and Hordaland Groups were mainly silty claystones except for the sandy Utsira Formation, which came in at 1123 m. The Nordland and Hordaland Groups had a very high content of drilling gas (average 2-3%), but no signs of gas were seen on the logs. The Rogaland Group was penetrated at 1690 m, and consists of the Balder and Sele Formations. The Balder Formation was dominated by tuff interbedded with claystone. The Sele Formation consisted of silty claystones with traces of limestones. At 1838 m the Shetland Group was penetrated. The Shetland Group consisted predominantly of silty clay stone with some limestones and thin sandstone beds. The Cromer Knoll Group had marl as the main lithology. The marl was interbedded with silty claystones and sandstones. The Dunlin Group consisted of claystone interbedded with marl and minor sandstone beds. The Statfjord Formation was penetrated at 2799 m and consisted of sandstones alternating with shale/claystones. The Hegre Group proved to be generally alternating sandstones and claystones.

Weak hydrocarbon shows were seen in the cuttings from 2210 m to 2490 m in the Shetland Group. The shows were seen in the sandstones and in the sandy parts of the claystones. There were bright yellow fluorescence, slow streaming moderate weak cut and yellow white residuum upon evaporation. No shows were seen in the sidewall cores. No hydrocarbons were found neither in the Statfjord nor the Lunde Formations. The only core attempted was in the Statfjord Formation but it jammed off and gave no recovery. No fluid samples were taken.

The well was permanently abandoned as a dry well on 21 June 1994.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
510.00	3110.00

Cuttings available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1000.0	[m]	DC	
1020.0	[m]	DC	
1040.0	[m]	DC	
1060.0	[m]	DC	
1080.0	[m]	DC	
1100.0	[m]	DC	
1120.0	[m]	DC	
1140.0	[m]	DC	
1160.0	[m]	DC	
1180.0	[m]	DC	
1200.0	[m]	DC	
1220.0	[m]	DC	
1240.0	[m]	DC	
1260.0	[m]	DC	
1280.0	[m]	DC	
1310.0	[m]	DC	
1320.0	[m]	DC	
1340.0	[m]	DC	
1360.0	[m]	DC	
1380.0	[m]	DC	
1400.0	[m]	DC	
1420.0	[m]	DC	
1440.0	[m]	DC	
1460.0	[m]	DC	
1480.0	[m]	DC	
1500.0	[m]	DC	
1520.0	[m]	DC	
1540.0	[m]	DC	
1560.0	[m]	DC	
1580.0	[m]	DC	
1600.0	[m]	DC	
1620.0	[m]	DC	
1640.0	[m]	DC	
1660.0	[m]	DC	
1680.0	[m]	DC	
1700.0	[m]	DC	

1720.0	[m]	DC	
1740.0	[m]	DC	
1760.0	[m]	DC	
1780.0	[m]	DC	
1800.0	[m]	DC	
1820.0	[m]	DC	
1840.0	[m]	DC	
1860.0	[m]	DC	
1880.0	[m]	DC	
1900.0	[m]	DC	
1920.0	[m]	DC	
1940.0	[m]	DC	
1960.0	[m]	DC	
1980.0	[m]	DC	
2000.0	[m]	DC	
2020.0	[m]	DC	
2040.0	[m]	DC	
2060.0	[m]	DC	
2080.0	[m]	DC	
2100.0	[m]	DC	
2120.0	[m]	DC	
2140.0	[m]	DC	
2160.0	[m]	DC	
2420.0	[m]	DC	
2440.0	[m]	DC	
2460.0	[m]	DC	
2480.0	[m]	DC	
2500.0	[m]	DC	
2520.0	[m]	DC	
2540.0	[m]	DC	
2560.0	[m]	DC	
2580.0	[m]	DC	
2600.0	[m]	DC	
2620.0	[m]	DC	
2640.0	[m]	DC	
2665.0	[m]	DC	
2675.0	[m]	DC	
2685.0	[m]	DC	
2693.0	[m]	DC	
2700.0	[m]	DC	

2710.0	[m]	DC	
2720.0	[m]	DC	
2730.0	[m]	DC	
2740.0	[m]	DC	
2745.0	[m]	DC	
2755.0	[m]	DC	
2765.0	[m]	DC	
2774.0	[m]	DC	
2783.0	[m]	DC	
2792.0	[m]	DC	
2801.0	[m]	DC	
2919.0	[m]	DC	
2936.0	[m]	DC	
2945.0	[m]	DC	
2954.0	[m]	DC	
2963.0	[m]	DC	
2972.0	[m]	DC	
2981.0	[m]	DC	
2990.0	[m]	DC	
2999.0	[m]	DC	
3008.0	[m]	DC	
3017.0	[m]	DC	
3026.0	[m]	DC	
3035.0	[m]	DC	

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
388	NORDLAND GP
1221	UTSIRA FM
1230	UNDIFFERENTIATED
1238	HORDALAND GP
1690	ROGALAND GP
1690	BALDER FM
1720	LISTA FM
1838	SHETLAND GP
1838	JORSALFARE FM
2070	KYRRE FM
2600	TRYGGVASON FM

2761	CROMER KNOLL GP
2761	ÅSGARD FM
2771	DUNLIN GP
2799	STATFJORD GP
2913	HEGRE GP
2913	LUNDE FM

Composite logs

Document name	Document format	Document size [MB]
1908	pdf	0.32

Geochemical information

Document name	Document format	Document size [MB]
1908_1	pdf	1.91

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

Document name	Document format	Document size [MB]
1908_34_4_8_COMPLETION_REPORT_AND_LOG	pdf	12.36

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DPIL MAC ZDL CN DSL TTRM	2650	3108
DPIL MAC ZDL GR TTRM	1334	2692
FMT GR CHT	2801	3080
HDIP GR	2681	3108
MWD - DIR GR IND RES	0	499
MWD - DIR GR IND RES	1460	2693
MWD - DIR GR IND RES	2693	3108
MWD - GR DPRS DIR	499	1460

SWC GR	1548	2572
SWC GR	2681	3108
VSP	2681	3108

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	498.0	36	500.0	0.00	LOT
SURF.COND.	13 3/8	1445.0	17 1/2	1465.0	1.66	LOT
INTERM.	9 5/8	2681.0	12 1/2	2693.0	1.86	LOT
OPEN HOLE		3110.0	8 1/2	3110.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
435	1.51	26.0		DUMMY	
499	1.12			GEL MUD	
996	1.17	15.0		GEL MUD	
1410	1.17	8.0		GEL MUD	
1460	1.26	5.0		GEL MUD	
2064	1.59	30.0		DUMMY	
2179	1.59	27.0		DUMMY	
2396	1.59	34.0		DUMMY	
2485	1.59	29.0		DUMMY	
2655	1.59	30.0		DUMMY	
2693	1.60	32.0		DUMMY	
2707	1.60	28.0		DUMMY	
2791	1.62	27.0		DUMMY	
2911	1.62	27.0		DUMMY	
3110	1.62	23.0		DUMMY	

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]
1908_Formation_pressure_(Formasjonstrykk)	pdf	0.22