

**General information**

Wellbore name	34/10-43 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Field	GULLFAKS SØR
Discovery	34/10-43 S
Well name	34/10-43
Seismic location	
Production licence	050 B
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	993-L
Drilling facility	TRANS. WILDCAT
Drilling days	46
Entered date	25.02.2001
Completed date	11.04.2001
Release date	11.04.2003
Publication date	19.10.2006
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	EARLY JURASSIC
1st level with HC, formation	STATFJORD GP
Kelly bushing elevation [m]	25.0
Water depth [m]	139.0
Total depth (MD) [m RKB]	5725.0
Final vertical depth (TVD) [m RKB]	3220.0
Maximum inclination [°]	101
Bottom hole temperature [°C]	121
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	LUNDE FM
Geodetic datum	ED50
NS degrees	61° 6' 30.78" N
EW degrees	2° 2' 59.76" E
NS UTM [m]	6775410.84



EW UTM [m]	448788.97
UTM zone	31
NPDID wellbore	4247

Wellbore history

General

Wildcat well 34/10-43 S was drilled in a structure in the south-eastern part of the Tampen Spur area, on one of the westerly-rotated fault blocks east of the Beta Ridge. The structure is eroded at BCU level, successively deeper towards the east, and is limited by east-west faults towards north. Planned well trajectory was highly deviated in order to test several objectives in one well. Primary objective was to test the potential for hydrocarbons in Middle Jurassic sandstones of the Statfjord Formation. The secondary objective was the Brent Group, Cook and Lunde Formation. Tertiary objectives were to penetrate Paleocene in an optimal position for exploring the lowermost part for sand/hydrocarbons (Ty Formation) and at TD, a prospect of the Late Jurassic, Munin Member. The planned TD of the well was at 4505 m (2565 m TVD RKB) with an inclination of 67 deg .

Operations and results

Well 34/10-43 S was spudded with the semi-submersible installation Transocean Wildcat on 25 February 2001 and drilled deviated through Triassic sediments of the Lunde Formation as the oldest penetrated sediments, to TD at 5725 m (3219.9 m TVD RKB) in the Early Cretaceous Cromer Knoll Group. The drilling progress was very good down to the Lunde Formation. After logging of the reservoir sections in the Middle-Early Jurassic and Triassic objectives, the drilling continued to final tertiary objective in the Late Jurassic prospect in the Munin Formation. This part was significantly slower to drill, caused by places of tight hole and also because of hard lithology. Several bits had to be implemented before TD was reached with an inclination of approximately 101 deg . The well was drilled with KCl mud down to 709 m, and with oil based mud (Versavert) from 709 m to TD.

There were no sands in the Paleocene prospect, and the Shetland Group was therefore encountered more than 100 m shallower than expected. The Brent prospect was much more eroded at the well trajectory than was prognosed. It was thus only partly penetrated and was interpreted as water bearing. Also the Cook Formation was water bearing, and this Formation was penetrated in an optimal position in the structure. Eight m (3 m TVD) of hydrocarbons were identified on logs in the upper Statfjord- (Nansen) Formation, in a reservoir with very good properties. The OWC was at 2848 m TVD MSL. Pressure points indicated an oil zone with a density of approx. 0.05 bar/m. Middle/Lower Statfjord and the Lunde Formations showed yet another water zone. The extended part of the well penetrated Munin sands, exactly as prognosed. The sands had very good reservoir potential, yet without hydrocarbons. The well gave very good seismic reflectors in this complex sub-basin.

No conventional cores were cut and no fluid samples were taken in the well.

The well was permanently abandoned on 11 April 2001 as a minor oil discovery.

Testing

No drill stem test was performed

**Cuttings at the Norwegian Offshore Directorate**

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
720.00	5725.00

Cuttings available for sampling?	YES
----------------------------------	-----

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
3150.0	[m]	DC	GEOSTR
3160.0	[m]	DC	GEOSTR
3169.0	[m]	DC	GEOSTR
3176.0	[m]	DC	GEOSTR
3182.0	[m]	DC	GEOSTR
3186.0	[m]	DC	GEOSTR
3192.0	[m]	DC	GEOSTR
3197.0	[m]	DC	GEOSTR
3203.0	[m]	DC	GEOSTR
3209.0	[m]	DC	GEOSTR
3215.0	[m]	DC	GEOSTR
3221.0	[m]	DC	GEOSTR
4555.0	[m]	DC	GEOSTR
4600.0	[m]	DC	GEOSTR
4620.0	[m]	DC	GEOSTR
4640.0	[m]	DC	GEOSTR
4660.0	[m]	DC	GEOSTR
4680.0	[m]	DC	GEOSTR
4700.0	[m]	DC	GEOSTR
4720.0	[m]	DC	GEOSTR
4740.0	[m]	DC	GEOSTR
4760.0	[m]	DC	GEOSTR
4780.0	[m]	DC	GEOSTR
4800.0	[m]	DC	GEOSTR
4820.0	[m]	DC	GEOSTR
4840.0	[m]	DC	GEOSTR
4860.0	[m]	DC	GEOSTR
4880.0	[m]	DC	GEOSTR
4900.0	[m]	DC	GEOSTR
4910.0	[m]	DC	GEOSTR



4940.0 [m]	DC	GEOSTR
4960.0 [m]	DC	GEOSTR
4980.0 [m]	DC	GEOSTR
5000.0 [m]	DC	GEOSTR
5020.0 [m]	DC	GEOSTR
5040.0 [m]	DC	GEOSTR
5060.0 [m]	DC	GEOSTR
5080.0 [m]	DC	GEOSTR
5100.0 [m]	DC	GEOSTR
5120.0 [m]	DC	GEOSTR
5140.0 [m]	DC	GEOSTR
5160.0 [m]	DC	GEOSTR
5180.0 [m]	DC	GEOSTR
5200.0 [m]	DC	GEOSTR
5230.0 [m]	DC	GEOSTR
5240.0 [m]	DC	GEOSTR
5260.0 [m]	DC	GEOSTR
5280.0 [m]	DC	GEOSTR
5300.0 [m]	DC	GEOSTR
5330.0 [m]	DC	GEOSTR
5350.0 [m]	DC	GEOSTR
5359.0 [m]	DC	GEOSTR
5368.0 [m]	DC	GEOSTR
5377.0 [m]	DC	GEOSTR
5395.0 [m]	DC	GEOSTR
5404.0 [m]	DC	GEOSTR
5413.0 [m]	DC	GEOSTR
5422.0 [m]	DC	GEOSTR
5434.0 [m]	DC	GEOSTR
5440.0 [m]	DC	GEOSTR
5449.0 [m]	DC	GEOSTR
5464.0 [m]	DC	GEOSTR
5473.0 [m]	DC	GEOSTR
5479.0 [m]	DC	GEOSTR
5491.0 [m]	DC	GEOSTR
5500.0 [m]	DC	GEOSTR
5515.0 [m]	DC	GEOSTR
5521.0 [m]	DC	GEOSTR
5533.0 [m]	DC	GEOSTR
5539.0 [m]	DC	GEOSTR



5548.0	[m]	DC	GEOSTR
5560.0	[m]	DC	GEOSTR
5572.0	[m]	DC	GEOSTR
5584.0	[m]	DC	GEOSTR
5596.0	[m]	DC	GEOSTR
5602.0	[m]	DC	GEOSTR
5618.0	[m]	DC	GEOSTR
5626.0	[m]	DC	GEOSTR
5638.0	[m]	DC	GEOSTR
5644.0	[m]	DC	GEOSTR
5655.0	[m]	DC	GEOSTR
5662.0	[m]	DC	GEOSTR
5674.0	[m]	DC	GEOSTR
5680.0	[m]	DC	GEOSTR
5692.0	[m]	DC	GEOSTR
5698.0	[m]	DC	GEOSTR
5704.0	[m]	DC	GEOSTR
5710.0	[m]	DC	GEOSTR
5716.0	[m]	DC	GEOSTR
5722.0	[m]	DC	GEOSTR
5725.0	[m]	DC	GEOSTR

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
164	NORDLAND GP
964	UTSIRA FM
997	HORDALAND GP
1817	ROGALAND GP
1817	BALDER FM
1891	LISTA FM
2049	SHETLAND GP
3163	CROMER KNOLL GP
3175	VIKING GP
3175	HEATHER FM
3204	BRENT GP
3204	NESS FM
3303	ETIVE FM
3326	RANNOCH FM



3345	DUNLIN GP
3345	DRAKE FM
3434	COOK FM
3544	BURTON FM
3600	AMUNDSEN FM
3878	STATFJORD GP
3878	NANSEN FM
3946	EIRIKSSON FM
4165	RAUDE FM
4370	HEGRE GP
4370	LUNDE FM
4950	VIKING GP
4950	HEATHER FM
5360	DRAUPNE FM
5675	CROMER KNOLL GP

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

Document name	Document format	Document size [MB]
4247 34 10 43 S COMPLETION LOG	.pdf	2.55
4247 34 10 43 S COMPLETION REPORT	.PDF	0.76

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD LWD - GR RES DIR	140	5720
PEX AIT-H MDT	3133	4476

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	223.0	36	228.0	0.00	LOT
SURF.COND.	20	709.0	26	716.0	1.55	LOT
INTERM.	13 3/8	2128.0	17 1/2	2138.0	1.95	LOT
OPEN HOLE		5725.0	8 1/2	5725.0	1.84	LOT



**Drilling mud**

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1322	1.23	15.0		GLYDRILL	
2141	1.45	21.0		GLYDRILL	
2276	1.62			DUMMY	
3161	1.72	51.0		VERSAVERT	
3161	1.67	52.0		VERSAVERT	
4490	1.67	52.0		VERSAVERT	
4562	1.70	49.0		VERSAVERT	
5077	1.72	46.0		VERSAVERT	
5503	1.72	46.0		VERSAVERT	
5725	1.72	54.0		VERSAVERT	

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]
4247 Formation pressure (Formasjonstrykk)	pdf	0.23

