General information

Wellbore name	34/10-44 S
Type	EXPLORATION
Purpose	WILDCAT
Status	RE-CLASS TO DEV
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Field	GULLFAKS SØR
Discovery	34/10-44 S (Rimfaks Lunde)
Well name	34/10-44
Seismic location	
Production licence	050
Drilling operator	Statoil ASA (old)
Drill permit	1018-L
Drilling facility	TRANS. WILDCAT
Drilling days	40
Entered date	30.05.2001
Completed date	08.07.2001
Release date	08.07.2003
Publication date	19.10.2006
Purpose - planned	WILDCAT
Reclassified to wellbore	34/10-J-4 H
Reentry	NO
Content	GAS/CONDENSATE
Discovery wellbore	YES
1st level with HC, age	LATE TRIASSIC
1st level with HC, formation	LUNDE FM
Kelly bushing elevation [m]	25.0
Water depth [m]	137.0
Total depth (MD) [m RKB]	4865.0
Final vertical depth (TVD) [m RKB]	3671.0
Maximum inclination [°]	58.5
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	LUNDE FM
Geodetic datum	ED50
NS degrees	61° 3' 50.65'' N
EW degrees	2° 0' 10.91'' E
NS UTM [m]	6770494.13

EW UTM [m]	446185.45
UTM zone	31
NPDID wellbore	4422

Wellbore history

General

Well 34/10-44 S was drilled under and east of the Rimfaks Discovery in the southern Tampen Spur area. The primary objective was gas injection in the Statfjord Formation Reservoir, which did not get sufficient support by the existing injector 34/10-J-1 H. The well is located in the P3 segment, situated in the northern part of the Rimfaks Discovery. The secondary objective was to drill into the Lunde Formation to investigate the hydrocarbon potential in this formation in the Rimfaks structure. Tertiary objective is gathering additional reservoir data for the Cook Formation. Coring was planned in the upper and middle parts of the formation.

Operations and results

Exploration well 34/10-44 S was spudded with the semi-submersible installation Transocean Wildcat on 30 May 2001 and drilled deviated to TD at 4865 m (3671 m TVD RKB) in the Triassic Lunde Formation. The top hole was vertical down to 226 m where the well started to build angle. The well was drilled using seawater and hi-vis pills down to 709 m, with Glydril KCl /polymer mud from 719 m to 2312 m, and with Versavert oil based mud from 2312 m to TD.

The Cook Formation was not present in the well. The well penetrated a 490 m interval with gas and condensate in a reservoir with moderate to good reservoir properties in the Lunde Formation.

One core was cut from 4447 m to 4492 m.

Well 34/10-44 S was suspended on 8 July 2001 as a gas/condensate discovery. It was re-entered with the semi-submersible installation Deepsea Trym for production testing.

Testing

A production test was performed in the Lunde Formation. The test produced oil, condensate, and gas from two different zones. Testing operations were terminated on 30 September 2001 and the test interval was permanently plugged and abandoned. After testing the well was converted to gas injection well 34/10-J-4 H in the Statfjord Formation.

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
162	NORDLAND GP
162	UNDIFFERENTIATED
841	UTSIRA FM
965	HORDALAND GP
965	UNDIFFERENTIATED

2002	ROGALAND GP
2002	BALDER FM
2060	LISTA FM
2278	SHETLAND GP
2278	UNDIFFERENTIATED
3498	DUNLIN GP
3498	BURTON FM
3535	AMUNDSEN FM
3720	STATFJORD GP
3720	NANSEN FM
3776	EIRIKSSON FM
3982	RAUDE FM
4200	HEGRE GP
4200	LUNDE FM

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

Document name	Document format	Document size [MB]
4422_34_10_44_S_COMPLETION_LOG	.pdf	5.10
4422_34_10_44_S_COMPLETION_REPORT	.PDF	0.77

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	4654	4868	17.4
2.0	4627	4649	11.1

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0				
2.0				

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0	550	560000	0.770	0.742	1020
2.0	645	350000	0.795	0.745	542

Logs

Log type	Log top depth [m]	Log bottom depth [m]
GR MDT CMR+	3730	3853
GR MDT CMR+	3765	3765
GR MDT CMR+ MDT SAMPLE	3861	4587
MWD CDR - VISION ADN	0	4818

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	220.0	36	220.0	0.00	LOT
SURF.COND.	20	711.0	26	724.0	1.54	LOT
INTERM.	13 3/8	2305.0	17 1/2	2315.0	1.73	LOT
INTERM.	9 5/8	3752.0	12 1/4	3762.0	1.74	LOT
LINER	7	4865.0	8 1/2	4865.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
711	1.03			seawater	
2305	1.44			Glydrillr	
3752	1.60			Versavert	
4861	1.56			Versavert	
4865	0.00			seawater	

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]
4422_Formation_pressure_(Formasjonstrykk)	pdf	0.22