

**General information**

Wellbore name	34/10-53 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	34/10-53 S
Well name	34/10-53
Seismic location	3D survey-St0504-nearest inline 1392 & nearest crossline 2331
Production licence	050
Drilling operator	Statoil Petroleum AS
Drill permit	1275-L
Drilling facility	DEEPSEA ATLANTIC
Drilling days	107
Entered date	06.12.2010
Completed date	24.03.2011
Release date	24.03.2013
Publication date	24.03.2013
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS/CONDENSATE
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	BRENT GP
Kelly bushing elevation [m]	32.0
Water depth [m]	137.0
Total depth (MD) [m RKB]	4526.0
Final vertical depth (TVD) [m RKB]	3879.0
Maximum inclination [°]	56
Bottom hole temperature [°C]	140
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	STATFJORD GP
Geodetic datum	ED50
NS degrees	61° 4' 4.71" N
EW degrees	2° 7' 0.34" E



NS UTM [m]	6770840.98
EW UTM [m]	452330.01
UTM zone	31
NPDID wellbore	6212

Wellbore history

General

Well 34/10-53 S and the subsequent geologic sidetrack 34/10-53 A was drilled in the Rinfaksdalen area, a down faulted and rotated fault-block in between Rinfaks and Gullfaks Sør. The general objective for the two wells was to determine the basis for further development in the Gullfaks Sør and Rinfaks area by exploring the Rutil, Opal and Brookitt prospects. The primary target for well 34/10-53 S was to test the Middle Jurassic Brent Group Rutil prospect while the Early Jurassic Statfjord Formation Brookitt prospect was secondary target.

Operations and results

Wildcat well 34/10-53 S was spudded with the semi-submersible installation Deepsea Atlantic on 6 December 2010 and drilled to TD at 4526 m (3879 m TVD) in the Early Jurassic Statfjord Formation. A pilot hole was drilled from surface to top Utsira Formation to check for shallow gas. No shallow gas was observed. No significant problem was encountered in the operations. The well was drilled with Sea water and hi-vis sweeps down to 1068 m, with Glydril mud from 1068 m to 2255 m, with Versatec oil-based mud from 2255 m to 3496 m, and with Versatherm oil based mud from 3496 m to TD.

The 34/10-53 S track encountered the Brent Group (Rutil) at 3634 m (3361 m TVD), which was 28 m shallower than prognosed. A gas column of 181 m TVD was proven in good quality sands throughout the Brent Group, with a GDT of 3945 m (3542 m TVD). Three different pressure systems were proven based on pressure data in the Brent Group. The Statfjord Formation (Brookitt) was encountered 12 m shallow to prognosis at 4423 m (3820 m TVD) and was water wet. No oil shows were reported from the well.

No cores were cut. Fluid samples were taken by MDT on drill pipe (MDT-TLC) and on wire line. An MDT-TLC gas sample was taken at 3651.6 m in the Tarbert Formation. MDT gas samples were taken on wire line at 3878.4 m in the Etive Formation and at 3654 m in the Tarbert Formation.

The well was plugged back for sidetracking and permanently abandoned on 24 March 2011 as a gas/condensate discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
3400.00	4525.00

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

**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
169	NORDLAND GP
949	UTSIRA FM
980	HORDALAND GP
1879	ROGALAND GP
1879	BALDER FM
1940	LISTA FM
2116	SHETLAND GP
3411	CROMER KNOLL GP
3558	VIKING GP
3558	HEATHER FM
3635	BRENT GP
3635	TARBERT FM
3719	NESS FM
3875	ETIVE FM
3890	RANNOCH FM
3956	DUNLIN GP
3956	DRAKE FM
4065	COOK FM
4234	AMUNDSEN FM
4424	STATFJORD GP

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - ARCVRES8 TELE	242	1068
LWD - ARCVRES8 TELE VSONIC8	242	901
LWD - ARCVRES8 TELE VSONIC8	2255	3496
LWD - ARCVRES9 TELE	1068	2255
LWD - GVR6 ARCVRES6 TELE STET ..	3496	4526
MDT	3640	4526
MDT	3654	3940
USIT MSIP	4470	4470

**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	239.0	36	242.0	0.00	LOT
SURF.COND.	20	1059.6	26	1068.0	1.53	LOT
INTERM.	13 3/8	2249.2	17 1/2	2255.0	1.74	LOT
INTERM.	9 5/8	3494.0	12 1/4	3496.0	1.96	LOT
LINER	7	4524.0	8 1/2	5426.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1123	1.20	13.0		Glydril	
1219	1.33	12.0		Glydril	
1280	1.31	16.0		Glydril	
1320	1.33	13.0		Glydril	
1498	1.34	14.0		Glydril	
1917	1.34	18.0		Glydril	
2155	1.39	31.0		Versatherm	
2255	1.34	21.0		Glydril	
3496	1.39	32.0		Versatec	
3712	1.58	52.0		Versatherm	
4526	1.56	56.0		Versatherm	