General information

Wellbore name	34/10-52 S
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	GULLFAKS SØR
Discovery	34/10-2 Gullfaks Sør
Well name	34/10-52
Seismic location	
Production licence	050
Drilling operator	StatoilHydro Petroleum AS
Drill permit	1257-L
Drilling facility	DEEPSEA ATLANTIC
Drilling days	98
Entered date	05.08.2009
Completed date	10.11.2009
Release date	10.11.2011
Publication date	08.08.2013
Purpose - planned	APPRAISAL
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	32.0
Water depth [m]	134.0
Total depth (MD) [m RKB]	1516.0
Final vertical depth (TVD) [m RKB]	1516.0
Maximum inclination [°]	1
Oldest penetrated age	TERTIARY
Oldest penetrated formation	HORDALAND GP
Geodetic datum	ED50
NS degrees	61° 4' 16.1'' N
EW degrees	2° 11' 31.33'' E
NS UTM [m]	6771140.92
EW UTM [m]	456396.94
UTM zone	31
NPDID wellbore	6147

Wellbore history

General

Well 34/10-52 S was drilled on the 10AB fault segment in the southern part of the Gullfaks Sør field, located in the northern part of the North Sea. The objective for this appraisal is to prove hydrocarbons and further production potential in the Gullfaks Sør Brent Group and to support decisions on future development in the Gullfaks Sør area.

Operations and results

Appraisal well 34/10-52 S was drilled with the semi-submersible installation Deepsea Atlantic. First spud was 5 August 2009. A 9 7/8" pilot hole was drilled from seabed 165.5 m to 800 m, to check for shallow gas. No shallow gas was observed from the pilot hole. Gas bubbles were observed at wellhead with ROV while pulling out of hole with 26" BHA. The section was displaced to 1.50 g/cc mud and no more gas bubbles were observed. No indications of hydrocarbons were interpreted on MWD/LWD logs from 9 7/8" pilot hole and 26" hole, all sand layers indicated drop in resistivity, hence water filled. Drilled 17 1/2" hole to 1516 m and lost circulation. At the same time lateral wellhead movement was observed. The bore hole was abandoned and a re-spud (34/10-52 ST2) was performed 40 m north on 15 September 2009. This well was drilled to 345 m where the well was observed flowing. The well was plugged back and 20" casing was installed at 301 m. Installed BOP and riser. Decided to suspend the operation and abandon the well due to wellhead movement and technical problems with rig equipment. The well was drilled with sweater and high viscous pills.

Target reservoir was not reached. No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 10 November 2009 as a dry well.

Testing

No drill stem test was performed.

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
166	NORDLAND GP
946	UTSIRA FM
957	HORDALAND GP

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - DIR	167	247
MWD - GR RES ECD DIR	247	790

MWD - GR RES ECD DIR	785	1516
MWD - GR RES ECD DIR SON	167	800
USIT CBL DCS	175	603

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	244.0	36	246.0	0.00	LOT
SURF.COND.	20	301.0	26	345.0	0.00	LOT
PILOT HOLE		800.0	9 7/8	800.0	0.00	LOT
OPEN HOLE		1516.0	17 1/2	1516.0	1.69	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
303	1.10	13.0		POLYMER	
319	1.10	10.0		POLYMER	
736	1.10	9.0		POLYMER	
793	1.28	9.0		Glydril	
796	1.11	10.0		POLYMER	
796	1.10	10.0		POLYMER	
1227	1.42	11.0		Glydril	
1401	1.20	12.0		Glydril	
1516	1.43	17.0		Glydril	
1841	1.26	14.0		Glydril	
2031	1.28	14.0		Glydril	
2110	1.30	19.0		Glydril	