

**General information**

Wellbore name	30/3-10 S
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	30/3-9
Well name	30/3-10
Seismic location	ST04M12-inline 900 & crossline 1477.seismic 3D survey
Production licence	052
Drilling operator	StatoilHydro Petroleum AS
Drill permit	1230-L
Drilling facility	WEST ALPHA
Drilling days	75
Entered date	14.02.2009
Completed date	29.04.2009
Release date	29.04.2011
Publication date	29.04.2011
Purpose - planned	APPRAISAL
Reentry	NO
Content	GAS/CONDENSATE
Discovery wellbore	NO
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	BRENT GP
Kelly bushing elevation [m]	18.0
Water depth [m]	122.0
Total depth (MD) [m RKB]	4168.0
Final vertical depth (TVD) [m RKB]	3962.0
Maximum inclination [°]	44
Bottom hole temperature [°C]	152
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	STATFJORD GP
Geodetic datum	ED50
NS degrees	60° 47' 43.5" N
EW degrees	2° 41' 11.8" E
NS UTM [m]	6740200.34



EW UTM [m]	482940.39
UTM zone	31
NPDID wellbore	6045

Wellbore history

General

Well 30/3-10 S is located in the Northern North Sea at the eastern flank of the Central Viking Graben, SE of the Huldra Field. The 30/3-10 S well was the second well to be drilled on the Canon structure. The Discovery well 30/3-9 was the first. The main objective of the well was to appraise hydrocarbons within the Brent Group of Jurassic age and prove additional hydrocarbons in the Statfjord Formation of Jurassic-Triassic age. Further objectives were to verify reservoir properties, fluid contacts, and fluid properties and to test up flank erosion of the Brent Group. Planned TD was 50 m into the Lunde Formation of the Triassic prognosed at 4298 m TVD RKB.

Operations and results

Appraisal well 30/3-10 S was spudded with the semi-submersible installation West Alpha on 14 February 2009 and drilled to TD at 4168 m in the Early Jurassic Statfjord Formation. No overpressured shallow gas was observed by the ROV at the wellhead or by the MWD while drilling the 36" and the 26" holes. The well was drilled vertical down to 2850 m before deviation was initiated. It was drilled with Spud mud down to 1412 m, with Versatec OBM from 1412 m to 3672 m, and with Versatherm OBM from 3672 m to TD.

The well penetrated rocks of Quaternary, Tertiary, Cretaceous, and Jurassic age. The top Brent Group was encountered at 3737 m, 75 m TVD shallow compared to the prognosis. It was 12 m TVD thick only and consisted of Ness Formation only. The top Statfjord Formation was penetrated approximately 224 m shallower than prognosis. The Brent Group proved as expected gas with a fluid gradient of 0.29 bar/m. No gas/water contact was observed. The Statfjord Formation proved to be water bearing.

High gas readings with peaks above 20% were recorded below 1800 m, with the highest levels seen in the Late Cretaceous Jorsalfare Formation. The lithology associated with the gas peaks was typically claystones with stringers of limestone/possible sandstones. No visible oil shows above the OBM were reported from the well.

No cores were cut. MDT fluid samples were collected in the Ness Formation at 3741.7 m, at 3749.65 m, and at 3754.88 m. The Quicksilver probe (PQ) was used for the sampling. The well was permanently abandoned on 29 April 2009 as a gas/condensate appraisal well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1420.00	4161.00



Cuttings available for sampling?	YES
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Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
2450.0	[m]	DC	RPS ENER
2470.0	[m]	DC	RPS EN
2490.0	[m]	DC	RPS EN
2510.0	[m]	DC	RPS EN
2530.0	[m]	DC	RPS EN
2550.0	[m]	DC	RPS EN
2570.0	[m]	DC	RPS EN
2590.0	[m]	DC	RPS EN
2610.0	[m]	DC	RPS EN
2630.0	[m]	DC	RPS EN
2650.0	[m]	DC	RPS EN
2670.0	[m]	DC	RPS EN
2690.0	[m]	DC	RPS EN
2710.0	[m]	DC	RPS EN
2730.0	[m]	DC	RPS EN
2750.0	[m]	DC	RPS EN
2770.0	[m]	DC	RPS EN
2790.0	[m]	DC	RPS EN
2810.0	[m]	DC	RPS EN
2830.0	[m]	DC	RPS EN
2850.0	[m]	DC	RPS EN
2870.0	[m]	DC	RPS EN
2890.0	[m]	DC	RPS EN
2910.0	[m]	DC	RPS EN
2930.0	[m]	DC	RPS EN
2950.0	[m]	DC	RPS EN
2970.0	[m]	DC	RPS EN
2990.0	[m]	DC	RPS EN
3010.0	[m]	DC	RPS EN
3030.0	[m]	DC	RPS EN
3050.0	[m]	DC	RPS EN
3070.0	[m]	DC	RPS EN
3090.0	[m]	DC	RPS EN
3110.0	[m]	DC	RPS EN
3130.0	[m]	DC	RPS EN



3150.0	[m]	DC	RPS EN
3170.0	[m]	DC	RPS EN
3190.0	[m]	DC	RPS EN
3210.0	[m]	DC	RPS EN
3230.0	[m]	DC	RPS EN
3250.0	[m]	DC	RPS EN
3270.0	[m]	DC	RPS EN
3290.0	[m]	DC	RPS EN
3310.0	[m]	DC	RPS EN
3330.0	[m]	DC	RPS EN
3350.0	[m]	DC	RPS EN
3370.0	[m]	DC	RPS EN
3390.0	[m]	DC	RPS EN
3410.0	[m]	DC	RPS EN
3430.0	[m]	DC	RPS EN
3450.0	[m]	DC	RPS EN
3480.0	[m]	DC	RPS EN
3490.0	[m]	DC	RPS EN
3510.0	[m]	DC	RPS EN
3530.0	[m]	DC	RPS EN
3550.0	[m]	DC	RPS EN
3570.0	[m]	DC	RPS EN
3590.0	[m]	DC	RPS EN
3610.0	[m]	DC	RPS EN
3630.0	[m]	DC	RPS EN
3650.0	[m]	DC	RPS EN
3670.0	[m]	DC	RPS EN
3678.0	[m]	DC	RPS EN
3690.0	[m]	DC	RPS EN
3702.0	[m]	DC	RPS EN
3711.0	[m]	DC	RPS EN
3723.0	[m]	DC	RPS EN
3732.0	[m]	DC	RPS EN
3738.0	[m]	DC	RPS EN
3750.0	[m]	DC	RPS EN
3780.0	[m]	DC	RPS EN
3789.0	[m]	DC	RPS EN
3798.0	[m]	DC	RPS EN
3825.0	[m]	DC	RPS EN
3837.0	[m]	DC	RPS EN



3852.0	[m]	DC	RPS EN
3861.0	[m]	DC	RPS EN
3870.0	[m]	DC	RPS EN
3873.0	[m]	DC	RPS EN
3897.0	[m]	DC	RPS EN
3924.0	[m]	DC	RPS EN
3942.0	[m]	DC	RPS EN
3954.0	[m]	DC	RPS EN
3963.0	[m]	DC	RPS EN
3972.0	[m]	DC	RPS EN
3981.0	[m]	DC	RPS EN
4008.0	[m]	DC	RPS EN
4017.0	[m]	DC	RPS EN
4026.0	[m]	DC	RPS EN
4035.0	[m]	DC	RPS EN
4038.0	[m]	DC	RPS EN
4044.0	[m]	DC	RPS EN
4053.0	[m]	DC	RPS EN
4062.0	[m]	DC	RPS EN
4071.0	[m]	DC	RPS EN
4077.0	[m]	DC	RPS EN
4089.0	[m]	DC	RPS EN
4098.0	[m]	DC	RPS EN
4116.0	[m]	DC	RPS EN
4122.0	[m]	DC	RPS EN
4140.0	[m]	DC	RPS EN

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
140	NORDLAND GP
751	UTSIRA FM
911	HORDALAND GP
1338	NO FORMAL NAME
1383	NO FORMAL NAME
1650	GRID FM
1690	NO FORMAL NAME
1963	ROGALAND GP
1963	BALDER FM



2027	SELE FM
2050	LISTA FM
2213	SHETLAND GP
2213	JORSALFARE FM
2510	KYRRE FM
3418	TRYGGVASON FM
3455	BLØDØKS FM
3467	SVARTE FM
3602	CROMER KNOLL GP
3602	RØDBY FM
3621	SOLA FM
3627	ÅSGARD FM
3708	VIKING GP
3708	DRAUPNE FM
3725	HEATHER FM
3737	BRENT GP
3737	NESS FM
3752	DUNLIN GP
3752	DRAKE FM
3871	COOK FM
3905	AMUNDSEN FM
4034	STATFJORD GP

Geochemical information

Document name	Document format	Document size [MB]
6045 01 30 3 10S gch transfer 1	txt	0.00
6045 02 30 3 10S gch results 1	txt	0.08

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AIT PEX ECS HNGS	3945	4131
AIT PEX ECS HNGS CMR+ GR	0	0
AIT PEX ECS HNGS GR	3669	3945
DSI OBM12 GR	3750	3945
LWD - ARC GR RES ECD DIR	2465	3672
LWD - DIR	140	200





LWD - GR RES ECD DIR	200	2122
LWD - IMP STET PWD ADN	3945	4168
LWD - TELE STET GR RES ECD DIR	3672	3945
MDT CMR GR	3715	3902
MDT GR	3741	3749
MDT GR	3749	3749
MDT GR	3958	3958
MDT GR	4033	4099
VIVSP	1237	3750
WAVSP	0	0

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	200.0	36	200.0	0.00	LOT
SURF.COND.	20	1402.0	26	1412.0	1.71	LOT
INTERM.	14	2452.0	17 1/2	2465.0	1.91	LOT
INTERM.	9 7/8	3670.0	12 1/4	3945.0	2.05	LOT
LINER	7	3944.0	8 1/2	3945.0	2.10	LOT
OPEN HOLE		4168.0	6	4168.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
632	1.64	30.0		Versatec	
1450	1.55	32.0		Versatec	
2122	1.61	34.0		Versatec	
2262	1.61	34.0		Versatec	
2440	1.64	25.0		Versatec	
2465	1.64	34.0		Versatec	
2757	1.75	38.0		Versatec	
3004	1.76	38.0		Versatec	
3484	1.82	38.0		Versatec	
3673	1.82	37.0		Versatec	
3689	1.87	60.0		Versatherm	
3871	1.87	60.0		Versatherm	



3945	1.90	62.0		Versatherm	
3945	2.00	72.0		Versatherm	
3945	1.90	60.0		Versatherm	
4037	2.00	67.0		Versatherm	
4115	2.00	66.0		Versatherm	
4168	1.98	71.0		Versatherm	
4168	2.00	66.0		Versatherm	