General information

Wellbore name	30/11-14
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	MUNIN
Discovery	30/11-14 (Slemmestad)
Well name	30/11-14
Seismic location	MC3D-NVG05STZ12-PSDM-KIR-FULLSTK-FIN-D In-line 1592 X-line: 2593
Production licence	272
Drilling operator	Statoil Petroleum AS
Drill permit	1626-L
Drilling facility	SONGA DELTA
Drilling days	30
Entered date	07.06.2016
Completed date	06.07.2016
Release date	06.07.2018
Publication date	06.07.2018
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS/CONDENSATE
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	TARBERT FM
Kelly bushing elevation [m]	29.0
Water depth [m]	107.0
Total depth (MD) [m RKB]	3467.0
Final vertical depth (TVD) [m RKB]	3466.0
Maximum inclination [°]	3.2
Bottom hole temperature [°C]	125
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	DRAKE FM
Geodetic datum	ED50
NS degrees	60° 11' 29.91'' N
EW degrees	2° 35' 11.08'' E

NS UTM [m]	6672982.46
EW UTM [m]	477063.48
UTM zone	31
NPDID wellbore	7982

Wellbore history

General

Well 30/11-14 was drilled to test the Slemmestad prospect on the eastern flank of the Fensal Sub-basin in the North Sea. The well is located 6 km southeast of the 30/11-8 S (Krafla) discovery and 25 km southwest of the Oseberg Sør facility in the North Sea. The primary exploration target was to prove petroleum in the Middle Jurassic Tarbert Formation. The secondary exploration target was to prove petroleum in the Middle Jurassic Ness Formation.

Operations and results

Wildcat well 30/11-14 was spudded with the semi-submersible installation Songa Delta on 7 June 2016 and drilled to TD at 3467 m in the Early Jurassic Drake Formation. No significant problem was encountered in the operations. The well was drilled with seawater, sweeps and bentonite PAD down to 1638 m and with XP-07 oil based mud from 1638 m to TD.

The Tarbert Formation came in at 2957 m. Gas was encountered in two intervals in the upper Tarbert Formation: from 2957 to a GWC at 2978 m and from 3030 to a GWC at 3035 m. Based on the logs, gas response was seen in the Ness Formation, mostly related to coal beds. No oil shows were seen on cuttings. On cores, spotted direct and cut fluorescence were seen at 2981 to 2987 m, 3036 to 3039 m and at 3087 to 3088 m.

Two cores were cut in succession from 2952 to 3166 m. Of this 209.6 m was recovered (97.9% recovery). MDT water samples were taken at 751.8 m in the Utsira Formation and 905.8 m in the Skade Formation. These samples were taken in an 8 1/2" pilot hole drilled from the 20" shoe down to 979 m. Further MDT samples were taken at 2981.9 m (water), 2959.4 m (gas), and 3033.6 m (gas).

The well was plugged back for sidetracking on 6 July 2016. It is classified 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]
480.00	3467.00

Cuttings available for sampling?	YES

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2952.0	3053.4	[m]
2	3061.0	3166.2	[m]

Total core sample length [m]	206.7
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
490.0	[m]	DC	PETROSTR
520.0	[m]	DC	PETROS
550.0	[m]	DC	PETROS
580.0	[m]	DC	PETROS
610.0	[m]	DC	PETROS
640.0	[m]	DC	PETROS
690.0	[m]	DC	PETROS
720.0	[m]	DC	PETROS
750.0	[m]	DC	PETROS
780.0	[m]	DC	PETROS
810.0	[m]	DC	PETROS
840.0	[m]	DC	PETROS
870.0	[m]	DC	PETROS
900.0	[m]	DC	PETROS
930.0	[m]	DC	PETROS
960.0	[m]	DC	PETROS
990.0	[m]	DC	PETROS
1020.0	[m]	DC	PETROS
1050.0	[m]	DC	PETROS
1080.0	[m]	DC	PETROS
1110.0	[m]	DC	PETROS
1140.0	[m]	DC	PETROS
1170.0	[m]	DC	PETROS
1200.0	[m]	DC	PETROS
1230.0	[m]	DC	PETROS
1260.0	[m]	DC	PETROS
1290.0	[m]	DC	PETROS
1320.0	[m]	DC	PETROS

1350.0	[m]	DC	PETROS
1380.0	[m]	DC	PETROS
1410.0	[m]	DC	PETROS
1440.0	[m]	DC	PETROS
1470.0	[m]	DC	PETROS
1500.0	[m]	DC	PETROS
1530.0	[m]	DC	PETROS
1560.0	[m]	DC	PETROS
1590.0	[m]	DC	PETROS
1620.0	[m]	DC	PETROS
1650.0	[m]	DC	PETROS
1680.0	[m]	DC	PETROS
1710.0	[m]	DC	PETROS
1740.0	[m]	DC	PETROS
1770.0	[m]	DC	PETROS
1800.0	[m]	DC	PETROS
1830.0	[m]	DC	PETROS
1860.0	[m]	DC	PETROS
1890.0	[m]	DC	PETROS
1920.0	[m]	DC	PETROS
1950.0	[m]	DC	PETROS
1980.0	[m]	DC	PETROS
2010.0	[m]	DC	PETROS
2040.0	[m]	DC	PETROS
2070.0	[m]	DC	PETROS
2110.0	[m]	DC	PETROS
2130.0	[m]	DC	PETROS
2150.0	[m]	DC	PETROS
2170.0	[m]	DC	PETROS
2190.0	[m]	DC	PETROS
2210.0	[m]	DC	PETROS
2230.0	[m]	DC	PETROS
2250.0	[m]	DC	PETROS
2270.0	[m]	DC	PETROS
2290.0	[m]	DC	PETROS
2310.0	[m]	DC	PETROS
2330.0	[m]	DC	PETROS
2350.0	[m]	DC	PETROS
2370.0	[m]	DC	PETROS
2390.0	[m]	DC	PETROS

2410.0	[m]	DC	PETROS
2430.0	[m]	DC	PETROS
2450.0	[m]	DC	PETROS
2470.0	[m]	DC	PETROS
2490.0	[m]	DC	PETROS
2510.0	[m]	DC	PETROS
2530.0	[m]	DC	PETROS
2550.0	[m]	DC	PETROS
2580.0	[m]	DC	PETROS
2640.0	[m]	DC	PETROS
2660.0	[m]	SWC	RRI
2680.0	[m]	DC	PETROS
2700.0	[m]	DC	PETROS
2720.0	[m]	DC	PETROS
2780.0	[m]	DC	PETROS
2790.0	[m]	DC	PETROS
2800.0	[m]	DC	PETROS
2810.0	[m]	DC	PETROS
2820.0	[m]	DC	PETROS
2830.0	[m]	DC	PETROS
2840.0	[m]	DC	PETROS
2850.0	[m]	DC	PETROS
2860.0	[m]	DC	PETROS
2860.0	[m]	DC	PETROS
2870.0	[m]	DC	PETROS
2880.0	[m]	DC	PETROS
2890.0	[m]	DC	PETROS
2892.0	[m]	DC	PETROS
2895.0	[m]	DC	PETROS
2898.0	[m]	DC	PETROS
2901.0	[m]	DC	PETROS
2904.0	[m]	DC	PETROS
2910.0	[m]	DC	PETROS
2916.0	[m]	DC	PETROS
2922.0	[m]	DC	PETROS
2928.0	[m]	DC	PETROS
2934.0	[m]	DC	PETROS
2940.0	[m]	DC	PETROS
2946.0	[m]	DC	PETROS
2949.0	[m]	DC	PETROS

2953.7	[m]	C	PETROS
2955.2	[m]	C	PETROS
2956.8	[m]	C	PETROS
2958.5	[m]	C	PETROS
2960.6	[m]	C	PETROS
2962.8	[m]	C	PETROS
2968.4	[m]	C	PETROS
2974.0	[m]	C	PETROS
2982.9	[m]	C	PETROS
2989.0	[m]	C	PETROS
2994.9	[m]	C	PETROS
3000.3	[m]	C	PETROS
3010.7	[m]	C	PETROS
3020.6	[m]	C	PETROS
3024.7	[m]	C	PETROS
3028.9	[m]	C	PETROS
3035.9	[m]	C	PETROS
3042.8	[m]	C	PETROS
3052.8	[m]	C	PETROS
3069.9	[m]	C	PETROS
3076.0	[m]	C	PETROS
3082.7	[m]	C	PETROS
3092.6	[m]	C	PETROS
3104.6	[m]	C	PETROS
3107.5	[m]	C	PETROS
3123.7	[m]	C	PETROS
3131.8	[m]	C	PETROS
3147.8	[m]	C	PETROS
3155.5	[m]	C	PETROS
3158.8	[m]	C	PETROS
3162.8	[m]	C	PETROS
3165.7	[m]	C	PETROS
3169.0	[m]	DC	PETROS
3178.0	[m]	DC	PETROS
3187.0	[m]	DC	PETROS
3196.0	[m]	DC	PETROS
3205.0	[m]	DC	PETROS
3214.0	[m]	DC	PETROS
3223.0	[m]	DC	PETROS
3229.0	[m]	DC	PETROS

3238.0	[m]	DC	PETROS
3244.0	[m]	DC	PETROS
3253.0	[m]	DC	PETROS
3262.0	[m]	DC	PETROS
3271.0	[m]	DC	PETROS
3280.0	[m]	DC	PETROS
3289.0	[m]	DC	PETROS
3298.0	[m]	DC	PETROS
3307.0	[m]	DC	PETROS
3316.0	[m]	DC	PETROS
3325.0	[m]	DC	HYDRO
3334.0	[m]	DC	PETROS
3343.0	[m]	DC	PETROS
3352.0	[m]	DC	PETROS
3361.0	[m]	DC	PETROS
3370.0	[m]	DC	PETROS
3379.0	[m]	DC	PETROS
3388.0	[m]	DC	PETROS
3397.0	[m]	DC	PETROS
3406.0	[m]	DC	PETROS
3409.0	[m]	DC	PETROS
3415.0	[m]	DC	PETROS
3424.0	[m]	DC	PETROS
3433.0	[m]	DC	PETROS
3442.0	[m]	DC	PETROS
3451.0	[m]	DC	PETROS
3460.0	[m]	DC	PETROS
3467.0	[m]	DC	PETROS

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
136	NORDLAND GP
492	UTSIRA FM
809	HORDALAND GP
809	UNDIFFERENTIATED
813	SKADE FM
944	UNDIFFERENTIATED
1335	GRID FM

1479	NO FORMAL NAME
1648	NO FORMAL NAME
2188	ROGALAND GP
2188	BALDER FM
2234	SELE FM
2247	HERMOD FM
2280	SELE FM
2338	LISTA FM
2475	VÅLE FM
2535	SHETLAND GP
2535	HARDRÅDE FM
2748	KYRRE FM
2892	VIKING GP
2892	HEATHER FM
2958	BRENT GP
2958	TARBERT FM
3204	NESS FM
3401	ETIVE FM
3405	RANNOCH FM
3420	DUNLIN GP
3420	DRAKE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AIT PEX ECS HNGS MSIP	2730	3467
AIT PEX MASIP	457	1638
MWD - DI GR RES	173	3467
MWD - DI GR RES DEN NEU SON	1638	2828
MWD- DI	136	469
PEX MSIP ROBN	457	978
ROBN PS HY PO LFA MS SC1 PC GR	666	906
SAMPLING	2959	3381
VSI4 GR	437	3465
XPT CMR	2845	3450

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	172.0	36	172.0	0.00	
SURF.COND.	20	457.0	26	466.0	1.55	FIT
PILOT HOLE		979.0	8 1/2	979.0	0.00	
INTERM.	13 3/8	1634.0	16	1638.0	0.00	
		1642.0		1642.0	1.63	LOT
LINER	9 5/8	2827.0	12 1/4	2828.0	0.00	
		2832.0		2832.0	1.62	LOT
OPEN HOLE		3467.0	8 1/2	3467.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
173	1.30	7.0		Bentonite/Polymer mud	
173	1.05	6.0		Spud Mud	
466	1.26	18.0		XP-07	
466	1.30	10.0		Bentonite/Polymer mud	
619	1.27	20.0		XP-07	
850	1.26	18.0		XP-07	
979	1.26	20.0		XP-07	
979	1.32	19.0		XP-07	
1107	1.28	19.0		XP-07	
1170	1.30	21.0		XP-07	
1675	1.34	22.0		XP-07	
1888	1.39	24.0		XP-07	
2667	1.26	20.0		XP-07	
2750	1.39	23.0		XP-07	
2826	1.25	14.0		XP-07	
2828	1.39	24.0		XP-07	
2830	1.25	14.0		XP-07	
3166	1.25	16.0		XP-07	
3467	1.26	20.0		XP-07	