

**General information**

Wellbore name	16/8-3 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
Well name	16/8-3
Seismic location	inline 960 xline 2295 (3D survey : ST0611 -BIN)
Production licence	360
Drilling operator	Statoil Petroleum AS
Drill permit	1434-L
Drilling facility	SONGA TRYM
Drilling days	52
Entered date	11.03.2013
Completed date	01.05.2013
Release date	09.12.2014
Publication date	09.12.2014
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	72.0
Total depth (MD) [m RKB]	3261.0
Final vertical depth (TVD) [m RKB]	3243.0
Maximum inclination [°]	13.3
Bottom hole temperature [°C]	109
Oldest penetrated age	PERMIAN
Oldest penetrated formation	ROTLIEGEND GP
Geodetic datum	ED50
NS degrees	58° 17' 43.4" N
EW degrees	2° 34' 54.5" E
NS UTM [m]	6461821.09
EW UTM [m]	475483.63
UTM zone	31
NPDID wellbore	7115



Wellbore history

General

The 16/8-3 S Lupin well was drilled in the Ling depression in the North Sea. The Lupin prospect was defined by a tilted horst block with several small internal rotated fault blocks of Permian age. The objective was to prove a commercial accumulation of hydrocarbons in Permian Rotliegendes sandstones.

Operations and results

Wildcat well 16/8-3 S was spudded with the semi-submersible installation Songa Trym on 11 March 2013 and drilled to TD at 3261 m (3243 m TVD) in the Permian Rotliegendes Group. A 9 7/8" pilot hole was drilled to 827 m to check for shallow gas. No shallow gas was seen. The well was drilled with spud mud down to 940 m, with Performadril water based mud from 940 m to 1765 m, and with XP-07 oil based mud from 1765 m to TD.

The well penetrated rocks of Quaternary, Neogene, Paleogene, Cretaceous, Jurassic, and Permian age. The top of the expected main reservoir, the Rotliegendes Group was picked at 3015 m (2998.4 m TVD), 99 m TVD deeper than prognosed. There were no indication of hydrocarbons in the well.

One core (from 2574.5 m to 2584 m) was cut in the shale of the Late Jurassic Draupne Formation in the 12 1/4" section, for rock mechanical studies. No wire line fluid samples were taken.

The well was permanently abandoned on 1 May 2013 as a dry well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
950.00	3261.00

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

Sample depth	Depth unit	Sample type	Laboratory
1000.0	[m]	DC	FUGRO
1020.0	[m]	DC	FUGRO
1040.0	[m]	DC	FUGRO
1060.0	[m]	DC	FUGRO
1080.0	[m]	DC	FUGRO



1100.0 [m]	DC	FUGRO
1120.0 [m]	DC	FUGRO
1140.0 [m]	DC	FUGRO
1160.0 [m]	DC	FUGRO
1180.0 [m]	DC	FUGRO
1200.0 [m]	DC	FUGRO
1220.0 [m]	DC	FUGRO
1240.0 [m]	DC	FUGRO
1260.0 [m]	DC	FUGRO
1280.0 [m]	DC	FUGRO
1300.0 [m]	DC	FUGRO
1320.0 [m]	DC	FUGRO
1340.0 [m]	DC	FUGRO
1360.0 [m]	DC	FUGRO
1380.0 [m]	DC	FUGRO
1400.0 [m]	DC	FUGRO
1420.0 [m]	DC	FUGRO
1440.0 [m]	DC	FUGRO
1460.0 [m]	DC	FUGRO
1480.0 [m]	DC	FUGRO
1500.0 [m]	DC	FUGRO
1520.0 [m]	DC	FUGRO
1540.0 [m]	DC	FUGRO
1560.0 [m]	DC	FUGRO
1570.0 [m]	DC	FUGRO
1580.0 [m]	DC	FUGRO
1590.0 [m]	DC	FUGRO
1600.0 [m]	DC	FUGRO
1610.0 [m]	DC	FUGRO
1620.0 [m]	DC	FUGRO
1630.0 [m]	DC	FUGRO
1640.0 [m]	DC	FUGRO
1650.0 [m]	DC	FUGRO
1650.0 [m]	DC	FUGRO
1670.0 [m]	DC	FUGRO
1680.0 [m]	DC	FUGRO
1690.0 [m]	DC	FUGRO
1700.0 [m]	DC	FUGRO
1710.0 [m]	DC	FUGRO
1720.0 [m]	DC	FUGRO



1730.0 [m]	DC	FUGRO
2014.0 [m]	DC	FUGRO
2026.0 [m]	DC	FUGRO
2038.0 [m]	DC	FUGRO
2050.0 [m]	DC	FUGRO
2062.0 [m]	DC	FUGRO
2074.0 [m]	DC	FUGRO
2086.0 [m]	DC	FUGRO
2098.0 [m]	DC	FUGRO
2110.0 [m]	DC	FUGRO
2122.0 [m]	DC	FUGRO
2134.0 [m]	DC	FUGRO
2146.0 [m]	DC	FUGRO
2155.0 [m]	DC	FUGRO
2167.0 [m]	DC	FUGRO
2179.0 [m]	DC	FUGRO
2191.0 [m]	DC	FUGRO
2203.0 [m]	DC	FUGRO
2215.0 [m]	DC	FUGRO
2227.0 [m]	DC	FUGRO
2239.0 [m]	DC	FUGRO
2251.0 [m]	DC	FUGRO
2263.0 [m]	DC	FUGRO
2275.0 [m]	DC	FUGRO
2287.0 [m]	DC	FUGRO
2299.0 [m]	DC	FUGRO
2311.0 [m]	DC	FUGRO
2323.0 [m]	DC	FUGRO
2335.0 [m]	DC	FUGRO
2347.0 [m]	DC	FUGRO
2359.0 [m]	DC	FUGRO
2371.0 [m]	DC	FUGRO
2383.0 [m]	DC	FUGRO
2395.0 [m]	DC	FUGRO
2407.0 [m]	DC	FUGRO
2419.0 [m]	DC	FUGRO
2431.0 [m]	DC	FUGRO
2443.0 [m]	DC	FUGRO
2455.0 [m]	DC	FUGRO
2467.0 [m]	DC	FUGRO



2479.0 [m]	DC	FUGRO
2491.0 [m]	DC	FUGRO
2503.0 [m]	DC	FUGRO
2515.0 [m]	DC	FUGRO
2527.0 [m]	DC	FUGRO
2539.0 [m]	DC	FUGRO
2548.0 [m]	DC	FUGRO
2554.0 [m]	DC	FUGRO
2560.0 [m]	DC	FUGRO
2566.0 [m]	DC	FUGRO
2572.0 [m]	DC	FUGRO
2578.0 [m]	DC	FUGRO
2584.9 [m]	DC	FUGRO
2590.0 [m]	DC	FUGRO
2596.0 [m]	DC	FUGRO
2602.0 [m]	DC	FUGRO
2608.0 [m]	DC	FUGRO
2614.0 [m]	DC	FUGRO
2620.0 [m]	DC	FUGRO
2626.0 [m]	DC	FUGRO
2632.0 [m]	DC	FUGRO
2638.0 [m]	DC	FUGRO
2644.0 [m]	DC	FUGRO
2650.0 [m]	DC	FUGRO
2656.0 [m]	DC	FUGRO
2662.0 [m]	DC	FUGRO
2668.0 [m]	DC	FUGRO
2674.0 [m]	DC	FUGRO
2680.0 [m]	DC	FUGRO
2686.0 [m]	DC	FUGRO
2692.0 [m]	DC	FUGRO
2716.0 [m]	DC	FUGRO
2722.0 [m]	DC	FUGRO
2734.0 [m]	DC	FUGRO
2746.0 [m]	DC	FUGRO
2752.0 [m]	DC	FUGRO
2758.0 [m]	DC	FUGRO
2764.0 [m]	DC	FUGRO
2770.0 [m]	DC	FUGRO
2776.0 [m]	DC	FUGRO



2782.0	[m]	DC	FUGRO
2788.0	[m]	DC	FUGRO
2797.0	[m]	DC	FUGRO
2803.0	[m]	DC	FUGRO
2809.0	[m]	DC	FUGRO
2815.0	[m]	DC	FUGRO
2821.0	[m]	DC	FUGRO
2827.0	[m]	DC	FUGRO
2833.0	[m]	DC	FUGRO
2839.0	[m]	DC	FUGRO
2845.0	[m]	DC	FUGRO
2851.0	[m]	DC	FUGRO
2857.0	[m]	DC	FUGRO
2863.0	[m]	DC	FUGRO
2869.0	[m]	DC	FUGRO
2875.0	[m]	DC	FUGRO
2881.0	[m]	DC	FUGRO
2887.0	[m]	DC	FUGRO
2893.0	[m]	DC	FUGRO
2899.0	[m]	DC	FUGRO
3025.0	[m]	DC	FUGRO
3223.0	[m]	DC	FUGRO
3235.0	[m]	DC	FUGRO
3253.0	[m]	DC	FUGRO

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
97	NORDLAND GP
816	UTSIRA FM
830	HORDALAND GP
1558	ROGALAND GP
1558	BALDER FM
1601	SELE FM
1612	LISTA FM
1712	VÅLE FM
1743	SHETLAND GP
1743	EKOFISK FM
1762	TOR FM



1941	HOD FM
2051	CROMER KNOLL GP
2051	RØDBY FM
2123	SOLA FM
2167	ÅSGARD FM
2570	VIKING GP
2570	DRAUPNE FM
2656	HEGRE GP
2734	ZECHSTEIN GP
3015	ROTLIEGEND GP

Logs

Log type	Log top depth [m]	Log bottom depth [m]
HNGS PEX MSIP	1800	3261
MDT GR	2658	3261
MSIP PEX GR	1406	2629
MWD LWD - ARC PP	178	936
MWD LWD - ARC TELE	178	827
MWD LWD - ARC TELE GVR	2646	3261
MWD LWD - PP ARC TELE	919	2646
USIT CBL	1180	1691
USIT CBL	1200	1691
VSP GR	1027	3160

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	
PILOT HOLE		827.0	9 7/8	827.0	0.00	
SURF.COND.	20	940.0	26	942.0	1.72	LOT
INTERM.	13 3/8	1765.0	17 1/2	1767.0	1.74	LOT
INTERM.	9 5/8	2613.0	12 1/4	2615.0	1.74	FIT
OPEN HOLE		3243.0	8 1/2	3243.0	0.00	

Drilling mud



Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
178	1.35	50.0		Spud Mud	
182	1.35	50.0		Spud Mud	
500	1.06	17.0		Spud Mud	
678	1.35	50.0		Spud Mud	
936	1.35	50.0		Spud Mud	
940	1.25	29.0		Performadril	
1576	1.30	32.0		Performadril	
1776	1.37	32.0		Performadril	
1895	1.25	24.0		XP-07 - Yellow	
2420	1.26	26.0		XP-07 - Yellow	
2584	1.28	25.0		XP-07 - Yellow	
2646	1.16	15.0		XP-07 - Yellow	
2646	1.41	25.0		XP-07 - Yellow	
2646	1.16	15.0		XP-07 - Yellow	
2646	1.40	24.0		XP-07 - Yellow	
2828	1.16	14.0		XP-07 - Yellow	
3251	1.17	14.0		XP-07 - Yellow	
3261	1.16	14.0		XP-07 - Yellow	