

**General information**

Wellbore name	6610/10-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6610/10-1
Seismic location	2Dline ST10312.SP1391 -inline 3701 & xline6996
Production licence	386
Drilling operator	Statoil Petroleum AS
Drill permit	1427-L
Drilling facility	WEST ALPHA
Drilling days	34
Entered date	01.01.2013
Completed date	03.02.2013
Release date	04.10.2013
Publication date	04.10.2013
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	18.0
Water depth [m]	244.0
Total depth (MD) [m RKB]	3006.0
Final vertical depth (TVD) [m RKB]	3006.0
Maximum inclination [°]	2.4
Oldest penetrated age	LATE TRIASSIC
Geodetic datum	ED50
NS degrees	66° 14' 9.42" N
EW degrees	10° 2' 46.89" E
NS UTM [m]	7346789.97
EW UTM [m]	547052.08
UTM zone	32
NPDID wellbore	7091



Wellbore history

General

The 6610/10-1 Lovund well was drilled about 120 kilometres northwest of Sandnessjøen and about 90 kilometres northeast of the Norne field. The main objective of the well was to prove petroleum in Lower Jurassic reservoir rocks (the Båt Group) in the Helgeland Basin, where eight wildcat wells have been drilled in and around the basin. The play in the area has not been confirmed. A secondary objective was to evaluate potential source rocks in the Åre Formation

Operations and results

Well 6610/10-1 was spudded with the semi-submersible installation West Alpha on 1 January 2013 and drilled to TD at 3006 m in the Late Triassic Grey Beds. No significant problem was encountered in the operations. No shallow gas was observed. The well was drilled with sea water and hi-vis sweeps down to 1051 m, with KCl/polymer/glycol mud from 1051 m to 2110 m, and with Low sulphate KCl/polymer/glycol mud from 2110 m to TD.

In the overburden, the well penetrated Tertiary, Cretaceous and Upper Jurassic claystones and sandstones. In the reservoir, the well penetrated sandstones, claystones and siltstones of Jurassic age, within the Tofte, Tilje and Åre formations. The Åre Formation was encountered at 2657 m and was 273 m thick. Åre comprises an upper part with abundant sandstones and a few coal beds, and a lower more carbonaceous part with less sandstones and numerous beds of coal, brown coal, and Carbonaceous shales. The Grey Beds are interpreted from the last observed coal in the Åre Formation at 2930 m. No moveable hydrocarbons were encountered in the well. No hydrocarbon shows were observed in the well, however trace residual shows were observed in the sidewall cores from the Tilje and Åre formations.

No cores were cut. Dry hole wire line logging was performed and no wire line fluid samples were taken.

The well was permanently abandoned on 3 February 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]
1050.00	3006.00

Cuttings available for sampling?	YES
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Lithostratigraphy



Top depth [mMD RKB]	Lithostrat. unit
373	NORDLAND GP
373	NAUST FM
463	KAI FM
1121	HORDALAND GP
1121	BRYGGE FM
1255	ROGALAND GP
1255	TARE FM
1346	TANG FM
1444	SHETLAND GP
1444	SPRINGAR FM
1659	NISE FM
1760	KVITNOS FM
1783	CROMER KNOLL GP
1783	LYSING FM
1792	LANGE FM
2030	LYR FM
2264	VIKING GP
2264	SPEKK FM
2292	MELKE FM
2360	FANGST GP
2360	NOT FM
2514	BÅT GP
2514	TOFTE FM
2526	ROR FM
2539	TILJE FM
2657	ÅRE FM
2930	GREY BEDS (INFORMAL)

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MSCT	2585	2992
MWD - DIR	262	314
MWD - GR RES APWD DIR	315	1047
MWD - GR RES DIR	2107	3006
MWD - GR RES DIR APWD...	1047	2107
MWD - RES TST SON DEN NEU	1047	2107



PEX DSI XPT	1710	3004
USIT CBL	262	965

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	311.0	36	314.0	0.00	LOT
SURF.COND.	13 3/8	1035.0	17 1/2	1051.0	1.57	LOT
INTERM.	9 5/8	2106.0	12 1/4	2110.0	1.71	LOT
OPEN HOLE		3006.0	8 1/2	3006.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
314	1.03	20.0		Spud Mud	
1072	1.32	24.0		Seawater	
1152	1.32	22.0		KCl/Polymer/Glycol	
1895	1.32	23.0		KCl/Polymer/Glycol	
2107	1.32	23.0		KCl/Polymer/Glycol	
2155	1.20	11.0		Low Sulphate/KCl/Polymer/Glycol	
2502	1.20	23.0		Low Sulphate/KCl/Polymer/Glycol	
2827	1.20	18.0		Low Sulphate/KCl/Polymer/Glycol	
3006	1.20	18.0		Low Sulphate/KCl/Polymer/Glycol	