

**General information**

Wellbore name	17/6-1
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	17/6-1
Seismic location	TA0701 xline 3007 & inline 1400
Production licence	545
Drilling operator	Norwegian Energy Company ASA
Drill permit	1330-L
Drilling facility	WEST ALPHA
Drilling days	34
Entered date	05.01.2011
Completed date	07.02.2011
Release date	13.11.2012
Publication date	13.11.2012
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	18.0
Water depth [m]	272.0
Total depth (MD) [m RKB]	3065.0
Final vertical depth (TVD) [m RKB]	3064.0
Maximum inclination [°]	2.4
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50
NS degrees	58° 44' 15.46" N
EW degrees	3° 55' 34.93" E
NS UTM [m]	6511357.46
EW UTM [m]	553627.98
UTM zone	31
NPDID wellbore	6501



Wellbore history

General

Well 17/6-1 was drilled on the Svaneøgle prospect located in the Ling Depression in the North Sea. The primary objective was to test the hydrocarbon potential of the Middle Jurassic Sandnes and Bryne Formations. Secondary objectives were to prove sand development and hydrocarbons in the Upper Jurassic Sauda Formation, and to prove reservoir presence and hydrocarbons in the Early Jurassic/Late Triassic Gassum/Skagerrak formations. A tertiary objective was to acquire quality data across the Balder Formation.

Operations and results

Wildcat well 17/6-1 was spudded with the semi-submersible installation West Alpha on 5 January 2011 and drilled to TD at 3065 m in the Late Triassic Skagerrak Formation. No significant problem was encountered in the operations. The well was drilled with seawater and hi-vis sweeps down to 712 m and with Glydril mud from 712 m to TD.

Top of the main target, Sandnes and Bryne formations was penetrated at 2630 m. The formations had a total gross reservoir thickness of 96 m containing sandstones interbedded with claystones and thin coal beds. Reservoir properties were poorer than expected in the Sandnes Formation, and only minor amounts of hydrocarbons were encountered in the uppermost part. The Bryne Formation had a better reservoir sand development, but was found to be water bearing. The secondary target Sauda Formation had no sand/reservoir development. The Gassum/Skagerrak Formation showed minor amounts of sandstones, but contained no hydrocarbons. The Balder Formation showed no reservoir development and had no indications of hydrocarbon shows. Two cuttings samples from the Sandnes Formation showed weak cut fluorescence (no core samples were taken); otherwise no oil shows were recorded in the well.

No cores were cut in the well. MDT fluid samples were taken at 2631.1 m, 2635.4 m, and at 2665 m. The two shallower sample points, at 2635.4 m and 2631.1 m both gave some indications of oil (perhaps 5%) on the LFA; however the mobility was so low that large draw-downs of 150 - 200 bar were necessary. Post well analysis showed that the two upper samples contained only 1 and 3 cm³ of oil, respectively. The deepest sample was a water sample.

The well was permanently abandoned on 7 February 2011 as a dry well with oil shows.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
716.00	3065.00

Cuttings available for sampling?	YES
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**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
290	NORDLAND GP
340	HORDALAND GP
716	ROGALAND GP
716	BALDER FM
745	SELE FM
789	LISTA FM
865	VÅLE FM
878	SHETLAND GP
1219	BLODØKS FM
2020	BOKNFJORD GP
2020	FLEKKEFJORD FM
2116	SAUDA FM
2489	TAU FM
2542	EGERSUND FM
2630	VESTLAND GP
2630	SANDNES FM
2647	BRYNE FM
2726	FJERRITSLEV FM
2800	GASSUM FM
2988	SKAGERRAK FM

Geochemical information

Document name	Document format	Document size [MB]
6501_01_17_6_1_gch_transfer_1	txt	0.00
6501_02_17_6_1_gch_results_1	txt	0.29

Logs

Log type	Log top depth [m]	Log bottom depth [m]
GR XPT HNGS HTNS TLD HRLA DSI	1952	3065
LWD - DI	290	368
LWD - DI	368	712
LWD - GR RES APWD DIR SON	368	713





LWD - GR RES APWD DIR SON ADN	716	1957
LWD - GVR ECO DIR SON	1957	3065
MDT GR	2631	2665
VSI GR	290	3055

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	368.0	36	368.0	0.00	LOT
SURF.COND.	20	706.7	26	713.0	1.45	LOT
PILOT HOLE		713.0	9 7/8	713.0	0.00	LOT
INTERM.	9 5/8	1952.0	12 1/4	1957.0	1.57	LOT
OPEN HOLE		3065.0	8 1/2	3065.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
350	1.04			Spud mud	
712	1.02			SW	
1050	1.13	19.0		Glydril WBM	
1957	1.24	15.0		Glydril WBM	
2220	1.25	16.0		Glydril WBM	
2582	1.25	16.0		Glydril WBM	
2790	1.24	17.0		Glydril WBM	
2890	1.24	17.0		Glydril WBM	
3065	1.25	17.0		Glydril WBM	