

**General information**

Wellbore name	15/6-12
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	15/6-12 (McHenry)
Well name	15/6-12
Seismic location	3D surveyST0730-inline 1699&xline1937
Production licence	303
Drilling operator	Statoil Petroleum AS
Drill permit	1335-L
Drilling facility	TRANSOCEAN LEADER
Drilling days	50
Entered date	22.12.2010
Completed date	09.02.2011
Release date	09.02.2013
Publication date	09.02.2013
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	HUGIN FM
Kelly bushing elevation [m]	23.5
Water depth [m]	115.5
Total depth (MD) [m RKB]	3930.0
Final vertical depth (TVD) [m RKB]	3930.0
Maximum inclination [°]	2.4
Bottom hole temperature [°C]	127
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50
NS degrees	58° 37' 48.51" N
EW degrees	1° 44' 15.47" E
NS UTM [m]	6499707.84
EW UTM [m]	426696.78



UTM zone	31
NPDID wellbore	6518

Wellbore history

General

Well 15/6-12 was drilled on the McHenry prospect on the south-western tip of the Gudrun Terrace in the south Viking Graben. The main objective was to test the Hugin Formation. The secondary objectives were to test the Sleipner and

Skagerrak formations. The Hugin Formation was also the main reservoir in the Dagny/Ermintrude discovery wells. The deep oil-water-contact observed in the 15/5-7 well on Dagny (3897 m TVD SS) indicated a possible spill from the Dagny/Ermintrude structure towards McHenry.

Operations and results

Wildcat well 15/6-12 was spudded with the semi-submersible installation on Transocean Leader on 22 December 2010 and drilled to TD at 3930 m in the Triassic Skagerrak Formation. Shallow gas was interpreted close to the well location and a 9 7/8" pilot hole was drilled from the 30" conductor shoe to 1060 m. No shallow gas was observed. Eighteen meter of drill string was lost in the hole prior to the logging job so loggers TD is 3914 m. Otherwise no significant problem occurred in the operations. The well was drilled with sea water and hi-vis pills down to 1104 m, with Performadrill WBM from 1104 m to 2768 m, and with Low-ECD XP-07 oil based mud from 2768 m to TD.

The Hugin Formation was penetrated at 3798 m. It was only 12 m thick and held a 4 m thick oil filled sandstone. The Hugin sand was prognosed to be between 10 and 100 m thick. The pressure measured in the Hugin Formation indicated no communication with the Dagny/Ermintrude discoveries to the south of 15/6-12. Otherwise there were no hydrocarbon indications apart from a 2.5 m thick limestone stringer with top at 2975 m. This limestone showed a significant resistivity increase and a decrease in density and gave a gas peak of 4.2 %, but no fluorescence was described. The secondary targets, Sleipner Formation and Skagerrak Formation were water bearing.

No cores were cut. An oil sample was collected with a MDT tool at 3806.0 m. The sample was estimated to be ca 11% contaminated with OBM.

The well was permanently abandoned on 9 February 2011 as an oil discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate



Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1110.00	3930.00

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

Sample depth	Depth unit	Sample type	Laboratory
3669.0	[m]	DC	
3675.0	[m]	DC	
3681.0	[m]	DC	
3687.0	[m]	DC	
3693.0	[m]	DC	
3699.0	[m]	DC	
3705.0	[m]	DC	
3711.0	[m]	DC	
3717.0	[m]	DC	
3723.0	[m]	DC	
3729.0	[m]	DC	
3735.0	[m]	DC	
3741.0	[m]	DC	
3747.0	[m]	DC	
3753.0	[m]	DC	
3759.0	[m]	DC	
3762.0	[m]	DC	
3765.0	[m]	DC	
3768.0	[m]	DC	
3771.0	[m]	DC	
3774.0	[m]	DC	
3777.0	[m]	DC	
3780.0	[m]	DC	
3783.0	[m]	DC	
3785.0	[m]	SWC	
3786.0	[m]	DC	
3789.0	[m]	DC	
3792.0	[m]	DC	
3792.5	[m]	SWC	
3795.0	[m]	DC	
3798.0	[m]	DC	
3798.5	[m]	SWC	



3801.0	[m]	DC	
3804.0	[m]	DC	
3807.0	[m]	DC	
3810.0	[m]	DC	
3816.0	[m]	DC	
3822.0	[m]	DC	
3830.0	[m]	DC	
3834.0	[m]	DC	
3840.0	[m]	DC	
3846.0	[m]	DC	
3852.0	[m]	DC	
3860.0	[m]	DC	
3866.0	[m]	DC	
3873.0	[m]	DC	
3879.0	[m]	DC	
3885.0	[m]	DC	
3891.0	[m]	DC	

Oil samples at the Norwegian Offshore Directorate

Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
DST	1A-1B	0.00	0.00	OIL	29.01.2011 - 00:00	YES
MDT		0.00	3806.00	OIL		YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
139	NORDLAND GP
762	UTSIRA FM
999	HORDALAND GP
1298	SKADE FM
1715	GRID FM
2191	ROGALAND GP
2191	BALDER FM
2244	SELE FM
2310	LISTA FM



2341	HEIMDAL FM
2559	TY FM
2751	SHETLAND GP
2751	EKOFISK FM
2782	TOR FM
3081	HOD FM
3517	BLODØKS FM
3526	SVARTE FM
3629	CROMER KNOLL GP
3629	RØDBY FM
3666	SOLA FM
3669	VIKING GP
3669	DRAUPNE FM
3780	HEATHER FM
3798	VESTLAND GP
3798	HUGIN FM
3810	SLEIPNER FM
3876	HEGRE GP
3876	SKAGERRAK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AIT GPIT PPC MSIP PPC PEX	3388	3914
MDT	3805	3896
MSCT	3785	3900
MWD - ARCVRES PP	203	1100
MWD - ARCVRES TELE PP PD STETH	1100	3930
PPC MSIP PPC GPIT TLD	2060	3633
VSI4 VSP	1000	3910

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	199.0	36	203.0	0.00	LOT
SURF.COND.	20	1092.0	26	1104.0	2.00	LOT
INTERM.	14	2754.0	17 1/2	2768.0	1.65	LOT



INTERM.	9 5/8	3629.0	12 1/4	3632.0	2.02	LOT
OPEN HOLE		3930.0	8 1/2	3930.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
800	1.41	35.0		Performadril	
900	1.41	36.0		Performadril	
1100	1.25	26.0		Performadril	
1336	1.25	29.0		Performadril	
2362	1.35	39.0		Performadril	
2406	1.37	36.0		Performadril	
2525	1.37	34.0		Performadril	
2684	1.37	42.0		Performadril	
2696	1.37	42.0		Performadril	
2765	1.47	19.0		OBM-Low ECD	
2765	1.37	36.0		Performadril	
2765	1.37	36.0		Performadril	
3440	1.45	23.0		OBM-Low ECD	
3629	1.56	25.0		OBM-Low ECD	
3680	1.89	38.0		OBM-Low ECD	
3786	1.89	43.0		OBM-Low ECD	
3812	1.89	47.0		OBM-Low ECD-HTHP	
3930	1.75	33.0		OBM-Low ECD	

Pressure plots

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

Document name	Document format	Document size [MB]
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