

**General information**

Wellbore name	8/5-1
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	8/5-1
Seismic location	3D Survey MC3D-Q8:inline 2132 & crossline 6713
Production licence	453 S
Drilling operator	Lundin Norway AS
Drill permit	1433-L
Drilling facility	MÆRSK GUARDIAN
Drilling days	78
Entered date	10.01.2013
Completed date	28.03.2013
Release date	28.03.2015
Publication date	20.05.2015
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	43.0
Water depth [m]	73.0
Total depth (MD) [m RKB]	2405.0
Final vertical depth (TVD) [m RKB]	2404.0
Maximum inclination [°]	5
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	SMITH BANK FM
Geodetic datum	ED50
NS degrees	57° 33' 43.83" N
EW degrees	3° 34' 49.67" E
NS UTM [m]	6380260.01
EW UTM [m]	534730.00
UTM zone	31
NPDID wellbore	7112



Wellbore history

General

Well 8/5-1 was drilled on the Oгна prospect on the Sørvestlandet High in the North Sea. The primary objective was to test the hydrocarbon potential in sandstones of the Middle Jurassic Sandnes and/or Bryne formations. A secondary objective was to evaluate the reservoir quality of the deeper Triassic sediments.

Operations and results

Wildcat well 8/5-1 was spudded with the jack-up installation Mærsk Guardian on 10 January 2013 and drilled to TD at 2405 m in the Triassic Smith Bank Formation. Shallow gas was encountered at several levels in the Nordland and Hordaland Group, also during the P&A phase, otherwise operations proceeded without significant problems. The well was drilled with seawater and bentonite hi-vis sweeps down to 228 m, with KCl/Polymer/GEM mud from 228 m to 905 m, and with Performadril/Glycol mud from 905 m to TD.

A ca 50 m thick and very rich but immature Late Jurassic Tau Formation source rock was penetrated by the well. Below Tau the well penetrated a 26 m thick Egersund Formation before the Sandnes Formation was encountered at 2339 m. The Sandnes Formation proved to be a 32 m thick siltstone. The well also drilled 34 m into Triassic aged Smith Bank Formation. The reservoir quality was poor in both target formations. The well was found to be dry without oil shows throughout. The structure was dependent on charge from a mature source rock in a local inlier basin southwest of the structure. The lack of hydrocarbons other than shallow gas is believed to be due to lack of such charge.

No cores were cut. No formation evaluation wire line logs were run in the well and no wire line fluid samples were taken

The well was permanently abandoned on 28 March 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]
250.00	2405.00

Cuttings available for sampling?	YES
----------------------------------	-----

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
116	NORDLAND GP



116	UNDIFFERENTIATED
717	HORDALAND GP
717	NO FORMAL NAME
1288	NO FORMAL NAME
1385	ROGALAND GP
1385	BALDER FM
1405	SELE FM
1429	FISKEBANK FM
1461	SELE FM
1483	LISTA FM
1566	VÅLE FM
1615	SHETLAND GP
1615	EKOFISK FM
1675	TOR FM
1728	HOD FM
2002	CROMER KNOLL GP
2002	SOLA FM
2013	TUXEN FM
2042	ÅSGARD FM
2176	BOKNEFJORD GP
2176	FLEKKEFJORD FM
2205	SAUDA FM
2260	TAU FM
2314	EGERSUND FM
2339	VESTLAND GP
2339	SANDNES FM
2371	HEGRE GP
2371	SMITH BANK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CAST CBL CCL GR	624	775
MWD - 228	228	668
MWD - RES GR PWD DEN NEU SON DIR	895	2405
MWD - RES GR PWD SON DIR	228	720
MWD - RES GR PWD SON DIR	668	905

**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	222.0	36	224.0	0.00	
SURF.COND.	20	656.0	26	663.0	1.50	LOT
PILOT HOLE		720.0	12 1/4	720.0	1.27	LOT
INTERM.	13 3/8	897.0	17 1/2	905.0	1.86	LOT
INTERM.	9 5/8	2047.0	12 1/4	2060.0	2.10	LOT
OPEN HOLE		2405.0	8 1/2	2405.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
156	1.04	10.0		Water Based	
229	1.04	10.0		Water Based	
663	1.20	21.0		Water Based	
666	1.22	19.0		Water Based	
905	0.00	20.0		Water Based	
1877	0.00	36.0		Water Based	
2060	0.00	43.0		Water Based	