



General information

Wellbore name	3/7-10 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	3/7-10
Seismic location	CRR2013RM il 45277 & xline 107 166
Production licence	539
Drilling operator	Premier Oil Norge AS
Drill permit	1591-L
Drilling facility	MÆRSK GUARDIAN
Drilling days	54
Entered date	23.07.2015
Completed date	14.09.2015
Release date	14.09.2017
Publication date	14.09.2017
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	42.0
Water depth [m]	68.5
Total depth (MD) [m RKB]	3511.0
Final vertical depth (TVD) [m RKB]	3465.0
Maximum inclination [°]	27.7
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	SMITH BANK FM
Geodetic datum	ED50
NS degrees	56° 27' 10.7" N
EW degrees	4° 4' 46.32" E
NS UTM [m]	6257157.55
EW UTM [m]	566540.27
UTM zone	31
NPID wellbore	7749



Wellbore history

General

Well 3/7-10 S was drilled to test the Myrhauk prospect in the Søgne Basin of the North Sea, about 10 km northeast of the Trym Field. The primary objective was to test a Jurassic sediment package off-lapping the NE flank of the Mandal High basement ridge.

Operations and results

Wildcat well 3/7-10 S was spudded with the jack-up installation Mærsk Guardian on 23 July 2015 and drilled to TD at 3511 m (3465 m TVD) m in the Triassic Smith Bank Formation. The well was spudded about 220m west of the reservoir target, to avoid a possible shallow gas hazard. Deviation was less than 2° down to 1500 m, and then deviation was increased to maximum 27.7 ° in the interval from 1500 m to 2750 m, and then vertical from there to TD. A 9 7/8" pilot hole was drilled from 158 m to 910 m. A shallow gas influx occurred at ca 800 m. The hole was plugged back to 754 m. No significant problem was encountered in further operations. The well was drilled with sea water/PHB/native clay/KCl/PAC down to 158 m, with Glydril mud from 240 m to 1875 m and with EMS-4600 oil based mud from 1875 m to TD.

The well encountered Top Sandnes Formation at 3356 m. It is 73 m thick and petrophysical analyses proved 46.5 % net sand with 17.4% average porosity. The underlying Bryne Formation, at 3429 m, was 38 m thick with 19.8 % net sand of 13% average porosity. No oil shows above the oil based mud was recorded in any section of the well. Traces of thermogenic methane with C2+ components are interpreted to be early mature gas from coals and carbonaceous shales interbedded with the sandstone units.

No cores were cut. No fluid sample was taken.

The well was permanently abandoned on 14 September 2015 as a dry well.

Testing

No drill stem test was performed.

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
111	NORDLAND GP
111	NO FORMAL NAME
174	NAUST FM
800	NO FORMAL NAME
1452	HORDALAND GP
1452	UNDIFFERENTIATED
2786	ROGALAND GP
2786	BALDER FM
2805	SELE FM



2825	LISTA FM
2851	VÅLE FM
2867	SHETLAND GP
2867	EKOFISK FM
2959	TOR FM
3070	HOD FM
3356	VESTLAND GP
3356	SANDNES FM
3430	BRYNE FM
3467	HEGRE GP
3467	SMITH BANK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - GR APWD	203	754
MWD - GR RES APWD DEN NEU SON	1905	3255
MWD - GR RES APWD FPWD DEN NEU S	3255	3511
MWD - GR RES APWD SON	110	910
MWD - GR RES APWD SON	754	1905
RWCH GR VSP	1425	3360

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	158.0	30	158.0	0.00	
SURF.COND.	20	748.6	26	754.0	1.66	LOT
PILOT HOLE		910.0	9 7/8	910.0	0.00	
INTERM.	13 3/8	1871.6	17 1/2	1905.0	1.93	LOT
INTERM.	9 5/8	3250.0	12 1/4	3255.0	2.20	FIT
OPEN HOLE		3511.0	8 1/2	3511.0	0.00	

Drilling mud



Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
201	1.03			Spud mud	
226	1.09			Spud mud	
494	1.11			Spud mud	
728	1.22	9.0		Green Glydril	
754	1.40	26.0		Green Glydril	
754	1.17	11.0		Green Glydril	
910	1.39	17.0		Glydril WBM	
910	1.03			Spud mud	
910	1.20	11.0		Green Glydril	
1020	1.40	16.0		Glydril	
1333	1.42	21.0		Glydril	
1597	1.43	21.0		Glydril WBM	
1700	1.47	19.0		Glydril WBM	
1905	1.58	42.0		EMS-4600	
1905	1.49	22.0		Glydril WBM	
1996	1.59	42.0		EMS-4600	
2273	1.64	42.0		EMS-4600	
2771	1.64	42.0		EMS-4600	
3041	1.68	43.0		EMS-4600	
3106	1.64	43.0		EMS-4600	
3369	1.71	45.0		EMS-4600	
3511	1.64	37.0		EMS-4600	