

**General information**

Wellbore name	6306/5-2
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	6306/5-2
Seismic location	CN6306R12 inline 1096& crossline 1720
Production licence	642
Drilling operator	Repsol Exploration Norge AS
Drill permit	1573-L
Drilling facility	BREDFORD DOLPHIN
Drilling days	51
Entered date	21.08.2015
Completed date	11.10.2015
Release date	11.10.2017
Publication date	11.10.2017
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	226.0
Total depth (MD) [m RKB]	3217.0
Final vertical depth (TVD) [m RKB]	3215.0
Maximum inclination [°]	4.2
Bottom hole temperature [°C]	115
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	INTRA MELKE FM SS
Geodetic datum	ED50
NS degrees	63° 43' 52.29" N
EW degrees	6° 34' 27.26" E
NS UTM [m]	7069508.55
EW UTM [m]	380227.94
UTM zone	32
NPDID wellbore	7726



Wellbore history

General

Well 6306/5-2 was drilled to test the Hagar prospect on the eastern flank of the Rås Basin adjacent to the Frøya High in the Norwegian Sea. It is located ca 3.7 km north of the 6306/5-1 gas discovery. The primary objective was to test the hydrocarbon potential in the Rogn Formation and Intra-Melke Formation Sandstone.

Operations and results

Wildcat well 6306/5-2 was spudded with the semi-submersible installation Bredford Dolphin on 21 August 2015 and drilled to TD at 3217 m in Middle Jurassic Intra Melke Sandstone Formation. No significant problem was encountered in the operations. The well was drilled with Seawater & sweeps PAD mud down to 1060 m, and with Aquadril mud from 1060 m to TD.

No shales or claystone sequences were penetrated in the Viking Group, only sandstone. Top Rogn Formation was encountered at 2940 m and top Intra-Melke Formation Sandstone at 2952 m. The reservoir properties were moderate in the Rogn Formation, with NTG of 96% and average porosity of 15%. The Intra Melke Sandstone Formation had NTG of 73% and average porosity of 10%. NMR logs suggests an average of 50 mD permeability in the Rogn Formation and 4 mD in the Intra Melke Sandstone Formation. MDT sampling in both the Intra Melke Sandstone and Rogn formations indicated a vertically connected reservoir at normal hydrostatic pressure. No oil shows were observed on cuttings and no increase above background levels of gas were observed during the entire drilling operation. No hydrocarbons have been interpreted from wireline data.

No cores were cut. Good pressure data was acquired on wire line, but no fluid sample was taken.

The well was permanently abandoned on 11 October 2015 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]
1063.00	3217.00

Cuttings available for sampling?	YES
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Lithostratigraphy

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



251	NAUST FM
1060	KAI FM
1144	HORDALAND GP
1144	BRYGGE FM
1503	ROGALAND GP
1503	TARE FM
1570	TANG FM
1810	SHETLAND GP
1810	SPRINGAR FM
1851	NISE FM
2060	KVITNOS FM
2485	CROMER KNOLL GP
2485	LYSING FM
2550	LANGE FM
2940	VIKING GP
2940	ROGN FM
2952	INTRA MELKE FM SS

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - GR APWD RES POR DEN NMR	2752	3215
MWD - GR RES PRESS SON APWD	1746	2450
MWD - GR RES SON APWD	344	2752
PEX ZPT	2742	3215
PPC MSIP PPC XPT	2742	3215
VSP	226	3215

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	342.0	36	344.5	0.00	
SURF.COND.	20	1053.0	26	1060.0	1.73	LOT
PILOT HOLE		1060.0	9 7/8	1060.0	0.00	
INTERM.	13 3/8	1737.0	17 1/2	1746.0	1.81	LOT
INTERM.	9 5/8	2742.0	12 1/4	2752.0	1.88	LOT
OPEN HOLE		3217.0	8 1/2	3217.0	0.00	

**Drilling mud**

Depth MD [m]	Mud weight [g/cm ³]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
345	1.39			Water	
345	1.06			Water	
400	1.50			Water	
1060	1.25			Water	
1060	1.50			Water	
1456	1.50			Water	
1745	1.55			Water	
2752	1.60			Water	
2755	1.35			Water	
2849	1.50			Water	
3119	1.50			Water	
3217	1.50			Water	