

**General information**

Wellbore name	35/9-5
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	35/9-5
Seismic location	Marf 0607(PGS)line 3165 Tracer 8837
Production licence	419
Drilling operator	Nexen Exploration Norge AS
Drill permit	1290-L
Drilling facility	WEST ALPHA
Drilling days	38
Entered date	01.01.2010
Completed date	07.02.2010
Release date	03.10.2011
Publication date	03.10.2011
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	18.0
Water depth [m]	366.0
Total depth (MD) [m RKB]	3531.0
Final vertical depth (TVD) [m RKB]	3529.0
Maximum inclination [°]	6.8
Bottom hole temperature [°C]	116
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	KROSSFJORD FM
Geodetic datum	ED50
NS degrees	61° 19' 28.9" N
EW degrees	3° 48' 45.19" E
NS UTM [m]	6799386.69
EW UTM [m]	543499.70
UTM zone	31
NPDID wellbore	6293



Wellbore history

General

The Brand well 35/9-5 was drilled ca 5 km west of the Gjøa Field on the Måløy slope in the northern North Sea. The main objective of the well was to evaluate the hydrocarbon potential of the Middle Cretaceous Agat Formation sandstone. The Agat trend had been tested by wells drilled north of Brand. The 35/9-3 well is an oil and gas discovery located 17 km to the northeast, whereas 35/3-3 and 35/3-4 known as Agat discoveries, encountered gas in coeval sands 58 km north. The Grosso well 35/6-2 S located to the north of the Brand well location also located good quality Agat sands. Based on these offsets, sandstones were expected of reasonably good quality with average porosities ranging from 18 to 22% and permeabilities of 1 to 200 mD.

Operations and results

Wildcat well 35/9-5 was spudded with the semi-submersible installation West Alpha on 1 January 2010 and drilled to TD at 3531 m in the Middle Jurassic Krossfjord Formation. No significant problem was encountered in the operations. The well was drilled with seawater and bentonite sweeps down to 470 m and with Glydril mud from 470 m to TD.

The well penetrated rocks of Quaternary, Tertiary, Cretaceous, and Jurassic age. There was very little sand preserved in the Agat Formation at the 35/9-5 location. The formation is described as a sandy limestone to calcareous sand with approximately 4.1 m of net reservoir with average 18% porosity and 77% Sw. There was a 0.6 m interval that calculated as ?pay?, with a 55% Sw, but there were no shows to confirm hydrocarbons in the Agat Formation or in any other part of the well.

No cores were cut. An MDT tool was run over the Middle Jurassic Krossfjord sandstone. Four stations were sampled, all tight. No valid pressure points or fluid samples were acquired.

The well was permanently abandoned on 7 February 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]
480.00	3531.00

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

Sample depth	Depth unit	Sample type	Laboratory
910.0	[m]	DC	APT
940.0	[m]	DC	APT



960.0 [m]	DC	APT
980.0 [m]	DC	APT
1000.0 [m]	DC	APT
1020.0 [m]	DC	APT
1060.0 [m]	DC	APT
1080.0 [m]	DC	APT
1100.0 [m]	DC	APT
1120.0 [m]	DC	APT
1160.0 [m]	DC	APT
1180.0 [m]	DC	APT
1200.0 [m]	DC	APT
1220.0 [m]	DC	APT
1240.0 [m]	DC	APT
1260.0 [m]	DC	APT
1280.0 [m]	DC	APT
1300.0 [m]	DC	APT
1320.0 [m]	DC	APT
1350.0 [m]	DC	APT
1360.0 [m]	DC	APT
1380.0 [m]	DC	APT
1400.0 [m]	DC	APT
1420.0 [m]	DC	APT
1440.0 [m]	DC	APT
1460.0 [m]	DC	APT
1480.0 [m]	DC	APT
1500.0 [m]	DC	APT
1520.0 [m]	DC	APT
1560.0 [m]	DC	APT
1580.0 [m]	DC	APT
1620.0 [m]	DC	APT
1640.0 [m]	DC	APT
1680.0 [m]	DC	APT
1700.0 [m]	DC	APT
1740.0 [m]	DC	APT
1760.0 [m]	DC	APT
1800.0 [m]	DC	APT
1820.0 [m]	DC	APT
1860.0 [m]	DC	APT
1880.0 [m]	DC	APT
1920.0 [m]	DC	APT



1940.0	[m]	DC	APT
1980.0	[m]	DC	APT
2000.0	[m]	DC	APT
2030.0	[m]	DC	APT
2060.0	[m]	DC	APT
2080.0	[m]	DC	APT
2120.0	[m]	DC	APT
2140.0	[m]	DC	APT
2170.0	[m]	DC	APT
2200.0	[m]	DC	APT
2220.0	[m]	DC	APT
2260.0	[m]	DC	APT
2280.0	[m]	DC	APT
2320.0	[m]	DC	APT
2340.0	[m]	DC	APT
2360.0	[m]	DC	APT
2390.0	[m]	DC	APT
2420.0	[m]	DC	APT
2440.0	[m]	DC	APT
2480.0	[m]	DC	APT
2500.0	[m]	DC	APT
2540.0	[m]	DC	APT
2560.0	[m]	DC	APT
2600.0	[m]	DC	APT
2620.0	[m]	DC	APT
2660.0	[m]	DC	APT
2680.0	[m]	DC	APT
2700.0	[m]	DC	APT
2721.0	[m]	DC	APT
2739.0	[m]	DC	APT
2760.0	[m]	DC	APT
2781.0	[m]	DC	APT
2799.0	[m]	DC	APT
2820.0	[m]	DC	APT
2841.0	[m]	DC	APT
2859.0	[m]	DC	APT
2880.0	[m]	DC	APT
2901.0	[m]	DC	APT
2919.0	[m]	DC	APT
2940.0	[m]	DC	APT



2961.0 [m]	DC	APT
2979.0 [m]	DC	APT
3000.0 [m]	DC	APT
3021.0 [m]	DC	APT
3039.0 [m]	DC	APT
3060.0 [m]	DC	APT
3081.0 [m]	DC	APT
3099.0 [m]	DC	APT
3141.0 [m]	DC	APT
3159.0 [m]	DC	APT
3180.0 [m]	DC	APT
3201.0 [m]	DC	APT
3219.0 [m]	DC	APT
3240.0 [m]	DC	APT
3261.0 [m]	DC	APT
3279.0 [m]	DC	APT
3291.0 [m]	DC	APT
3300.0 [m]	DC	APT
3309.0 [m]	DC	APT
3321.0 [m]	DC	APT
3330.0 [m]	DC	APT
3339.0 [m]	DC	APT
3351.0 [m]	DC	APT
3363.0 [m]	DC	APT
3369.0 [m]	DC	APT
3376.0 [m]	SWC	APT
3390.0 [m]	DC	APT
3400.9 [m]	SWC	APT
3411.0 [m]	DC	APT
3420.0 [m]	DC	APT
3429.0 [m]	DC	APT
3441.0 [m]	DC	APT
3450.0 [m]	DC	APT
3459.0 [m]	DC	APT
3471.0 [m]	DC	APT
3477.0 [m]	DC	APT
3489.0 [m]	DC	APT
3501.0 [m]	DC	APT
3510.0 [m]	DC	APT
3519.0 [m]	DC	APT



3522.1	[m]	SWC	APT
3531.0	[m]	DC	APT

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
384	NORDLAND GP
605	HORDALAND GP
670	GRID FM
860	ROGALAND GP
860	BALDER FM
916	SELE FM
1103	LISTA FM
1397	VÅLE FM
1464	SHETLAND GP
1464	JORSALFARE FM
1588	KYRRE FM
2237	TRYGGVASON FM
2586	BLODØKS FM
2598	SVARTE FM
2713	CROMER KNOLL GP
2713	RØDBY FM
2975	AGAT FM
3114	ÅSGARD FM
3254	VIKING GP
3254	DRAUPNE FM
3376	KROSSFJORD FM

Geochemical information

Document name	Document format	Document size [MB]
6293_01_35_9_5_gch_transfer_1	txt	0.00
6293_02_35_9_5_gch_results_1	txt	0.09

Logs





Log type	Log top depth [m]	Log bottom depth [m]
CMR HNGS	2720	3435
LWD - DI	382	470
LWD - GR RES DI PWD	470	2729
LWD - RAB GR RES DI PWD	2729	3531
MDT	3376	3386
MSCT	3363	3522
MSCT	3477	3522
MSIP PEX	382	3500
VSP	1105	3510

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	463.0	36	470.0	0.00	LOT
SURF.COND.	20	944.0	26	950.0	1.68	LOT
INTERM.	13 3/8	1602.0	17 1/2	1608.0	1.50	LOT
INTERM.	9 5/8	2727.0	12 1/4	2729.0	1.70	LOT
OPEN HOLE		3531.0	8 1/2	3531.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
507	1.29	22.0		KCL mud	
900	1.29	16.0		KCL mud	
950	1.24	18.0		KCL mud	
1520	1.24	21.0		Glydrill / KCL mud	
1650	1.26	22.0		Glydrill / KCL mud	
2507	1.34	23.0		Glydrill / KCL mud	
2630	1.34	26.0		Glydrill / KCL mud	
3001	1.40	23.0		Glydrill / KCL mud	
3123	1.45	10.0		Glydrill / KCL mud	
3390	1.24	17.0		Glydrill / KCL mud	
3390	1.45	26.0		Glydrill / KCL mud	