



General information

Wellbore name	6305/9-1
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	6305/9-1
Seismic location	NH-OLSE98R01-inline5170 & xline3865
Production licence	252
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	1008-L
Drilling facility	TRANSOCEAN ARCTIC
Drilling days	23
Entered date	09.07.2001
Completed date	31.07.2001
Release date	31.07.2003
Publication date	15.06.2005
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	24.0
Water depth [m]	187.0
Total depth (MD) [m RKB]	2655.0
Final vertical depth (TVD) [m RKB]	2654.0
Maximum inclination [°]	2.9
Bottom hole temperature [°C]	86
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	SPRINGAR FM
Geodetic datum	ED50
NS degrees	63° 17' 59.96" N
EW degrees	5° 59' 14.63" E
NS UTM [m]	7022673.85
EW UTM [m]	649731.56
UTM zone	31
NPDID wellbore	4297



Wellbore history

General

The exploration well 6305/9-1 was drilled on the "Blåveis" prospect in the southeastern part of the block, east of the Ormen Lange Field. The main objective of the well was to test if hydrocarbons were present in the Tertiary Egga Member in the Våle Formation, and in the Maastrichtian Springar Formation sandstones.

Operations and results

Wildcat well 6305/9-1 was spudded with the semi-submersible installation Transocean Arctic on 9 July 2001 and drilled to TD at 2655 m in the Late Cretaceous Springar Formation. The well was drilled with seawater and hi-vis pills down to 680 m and with GLYDRIL KCl/polymer mud from 680 m to TD.

In the Lower Paleocene an Egga Member sandstone of the Våle Formation was found, with good sands that became increasingly interbedded with claystone towards top of the underlying Springar Formation. The clean sandstone intervals were high porosity - high permeability reservoirs. No hydrocarbon indications were observed. One core was cut in the Egga Member, covering 17.4 m of the 54 m thick sandstone. The core shows a deposition within stacked channels and related overbank areas of intraslope basin turbidite system. The reservoir properties in the cored interval show 27.5% porosity and 2280 mD permeability. No core was taken in the Springar Formation. The reservoir quality of the Springar Formation clean sands is about similar to the Egga Member but the net sand fraction is less. The geology of the well was very much as prognosed, especially the formation tops in the lower part of the well came in almost as prognosed. The formation pressure in the lower Tertiary was hydrostatic. Organic geochemical analysis showed vitrinite reflectance Ro values in the range of 0.35-0.40 for the Egga reservoir sandstone and Springar Formation, which means that source rocks at this level are thermally immature for hydrocarbon expulsion. Extracts from samples of the Egga Sandstone and Springar Formation gave only traces of early mature, locally derived hydrocarbons. No fluid sample was attempted.

The well was permanently abandoned on 31 July 2001 as a dry hole.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
700.00	2655.00

Cuttings available for sampling?	YES
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Cores at the Norwegian Offshore Directorate



Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2477.0	2494.4	[m]

Total core sample length [m]	17.4
Cores available for sampling?	YES

Core photos

2477-2478m



2478-2479m



2479-2480m



2480-2481m



2481-2482m



2482-2483m



2483-2484m



2484-2485m



2485-2486m



2486-2487m



2487-2488m



2488-2489m



2489-2490m



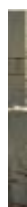
2490-2491m



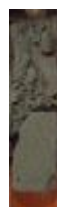
2491-2492m



2492-2493m



2493-2494m



2494-2495m

Palynological slides at the Norwegian Offshore Directorate



Sample depth	Depth unit	Sample type	Laboratory
1210.0	[m]	DC	RRI
1230.0	[m]	DC	RRI
1250.0	[m]	DC	RRI
1510.0	[m]	DC	RRI
1530.0	[m]	DC	RRI
1560.0	[m]	DC	RRI
1580.0	[m]	DC	RRI
1600.0	[m]	DC	RRI
1620.0	[m]	DC	RRI
1640.0	[m]	DC	RRI
1660.0	[m]	DC	RRI
1680.0	[m]	DC	RRI
1700.0	[m]	DC	RRI
1720.0	[m]	DC	RRI
1740.0	[m]	DC	RRI
1760.0	[m]	DC	RRI
1780.0	[m]	DC	RRI
1800.0	[m]	DC	RRI
1820.0	[m]	DC	RRI
1840.0	[m]	DC	RRI
1860.0	[m]	DC	RRI
1880.0	[m]	DC	RRI
1900.0	[m]	DC	RRI
1920.0	[m]	DC	RRI
1940.0	[m]	DC	RRI
1960.0	[m]	DC	RRI
1980.0	[m]	DC	RRI
2010.0	[m]	DC	RRI
2030.0	[m]	DC	RRI
2050.0	[m]	DC	RRI
2070.0	[m]	DC	RRI
2090.0	[m]	DC	RRI
2110.0	[m]	DC	RRI
2130.0	[m]	DC	RRI
2150.0	[m]	DC	RRI
2170.0	[m]	DC	RRI
2190.0	[m]	DC	RRI
2210.0	[m]	DC	RRI
2230.0	[m]	DC	RRI



2250.0	[m]	DC	RRI
2270.0	[m]	DC	RRI
2290.0	[m]	DC	RRI
2310.0	[m]	DC	RRI
2322.0	[m]	DC	RRI
2340.0	[m]	SWC	RRI
2349.0	[m]	DC	RRI
2355.0	[m]	DC	RRI
2361.0	[m]	DC	RRI
2367.0	[m]	DC	RRI
2373.0	[m]	DC	RRI
2379.0	[m]	DC	RRI
2385.0	[m]	DC	RRI
2391.0	[m]	DC	RRI
2397.0	[m]	DC	RRI
2403.0	[m]	DC	RRI
2409.0	[m]	DC	RRI
2415.0	[m]	DC	RRI
2421.0	[m]	DC	RRI
2427.0	[m]	DC	RRI
2433.0	[m]	DC	RRI
2439.0	[m]	DC	RRI
2445.0	[m]	DC	RRI
2451.0	[m]	DC	RRI
2457.0	[m]	DC	RRI
2463.0	[m]	DC	RRI
2469.0	[m]	DC	RRI
2472.0	[m]	DC	RRI
2477.0	[m]	C	RRI
2496.0	[m]	DC	RRI
2496.0	[m]	DC	RRI
2505.0	[m]	DC	RRI
2505.0	[m]	SWC	RRI
2511.0	[m]	DC	RRI
2525.0	[m]	SWC	RRI
2527.5	[m]	SWC	RRI
2535.0	[m]	SWC	RRI
2540.0	[m]	SWC	RRI
2544.0	[m]	SWC	RRI
2548.0	[m]	SWC	RRI



2555.0	[m]	SWC	RRI
2559.0	[m]	DC	RRI
2565.0	[m]	SWC	RRI
2571.0	[m]	DC	RRI
2575.0	[m]	SWC	RRI
2580.0	[m]	DC	RRI
2590.0	[m]	SWC	RRI
2598.0	[m]	DC	RRI
2601.0	[m]	DC	RRI
2610.0	[m]	SWC	RRI
2619.0	[m]	DC	RRI
2628.0	[m]	DC	RRI
2631.0	[m]	DC	RRI
2637.0	[m]	DC	RRI
2643.0	[m]	DC	RRI
2649.0	[m]	DC	RRI
2650.0	[m]	SWC	RRI
2655.0	[m]	DC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
211	NORDLAND GP
211	NAUST FM
1074	KAI FM
1303	HORDALAND GP
1303	BRYGGE FM
1669	ROGALAND GP
1669	TARE FM
1948	TANG FM
2437	VÅLE FM
2469	EGGA FM (INFORMAL)
2523	SHETLAND GP
2523	SPRINGAR FM

Composite logs





Document name	Document format	Document size [MB]
4297	pdf	0.21

Geochemical information

Document name	Document format	Document size [MB]
4297_1	pdf	3.07

Documents - reported by the production licence (period for duty of secrecy expired)

Document name	Document format	Document size [MB]
4297_6305_9_1_COMPLETION_LOG	.PDF	9.05
4297_6305_9_1_COMPLETION_REPORT	.PDF	1.82

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMST GR	2340	2650
DSI GR ACTS	2068	2653
DUAL CSI-GR VSP	1790	2620
MDT GR	2474	2548
MWD LWD	211	274
MWD LWD - ADN RAB	2295	2477
MWD LWD - ADN RAB	2460	2654
MWD LWD - CDR	267	671
MWD LWD - CDR ISONIC	674	2290

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	272.0	36	272.0	0.00	LOT
SURF.COND.	20	675.0	26	680.0	1.50	LOT
INTERM.	9 5/8	2295.0	12 1/4	2305.0	1.67	LOT
OPEN HOLE		2655.0	8 1/2	2655.0	0.00	LOT



**Drilling mud**

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
211	1.05			WATER BASED	
274	1.05			WATER BASED	
680	1.05			WATER BASED	
2138	1.39	23.0		WATER BASED	
2195	1.39	23.0		WATER BASED	
2305	1.35	22.0		WATER BASED	
2477	1.30	22.0		WATER BASED	
2580	1.30	19.0		WATER BASED	
2655	1.30	21.0		WATER BASED	

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]
4297 Formation pressure (Formasjonstrykk)	PDF	0.28

