General information

Wellbore name	6205/3-1 R
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6205/3-1
Seismic location	NM1 - 809 & SP 820
Production licence	154
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	623-L2
Drilling facility	MÆRSK JUTLANDER
Drilling days	72
Entered date	20.09.1990
Completed date	30.11.1990
Plugged and abondon date	30.11.1990
Release date	30.11.1992
Publication date	29.05.2002
Purpose - planned	WILDCAT
Reentry	YES
Reentry activity	DRILLING
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	23.0
Water depth [m]	159.0
Total depth (MD) [m RKB]	5264.0
Final vertical depth (TVD) [m RKB]	5253.0
Bottom hole temperature [°C]	155
Oldest penetrated age	LATE JURASSIC
Oldest penetrated formation	SPEKK FM
Geodetic datum	ED50
NS degrees	62° 57' 8.62'' N
EW degrees	5° 56' 38.11'' E
NS UTM [m]	6983872.90
EW UTM [m]	649328.84
UTM zone	31
NPDID wellbore	1510

Wellbore history

General

Well 6205/3-1 is situated in the northern part of the block on the B-prospect, which is an easterly tilted fault block bounded to the west by a northeast-southwest trending normal fault. The reservoir sequences are truncated at the crest of the fault block. The license area is bounded to the east and south by the Møre-Trøndelag Fault Zone, and to the north by the Jan Mayen fracture zone and the Frøya High. The Gossa High is situated in the western part of the license area at the western boundary of the Møre Basin. Well 6205/3-1 was the first obligation well to be drilled in license 154, and the first to be drilled in the Møre area. No direct correlation to the Haltenbanken or northern North Sea was possible. While the commitment was to drill to 4500 m or to Triassic sediments whichever came first, total depth was planned at 5100 m in Jurassic rocks of the Båt Group. The primary objectives for the well 6205/3-1 were to prove oil in the Jurassic sandstones and to verify the structural and sedimentological inte

Operations and results

Well 6205/3-1 was spudded on 24 October 1989 with the semi-submersible rig "Mærsk Jutlander" and re-spudded on 29 October after high angle had developed in the surface hole. A kickoff was carried out at 2800 m using bent sub and motor from 2800 to 2886 m in two bit runs due to problems in receiving tool face from MWD. Apart from some experiences with tight hole, drilling went on without any significant problems. The well was suspended at 4300 m in the Lower Cretaceous Åsgard Formation on 11 February 1990 because of environmental restrictions, which prohibited drilling through any formations containing hydrocarbons after 15 February. None of the objective horizons were penetrated. The well was re-entered on 20 September 1990 and was thereafter designated 6205/3-l R. The bottom of the rathole below the 9 5/8" shoe was encountered 6 m high at 4294 m. The well was drilled to TD of 5264 m on 6 November 1990. The well bores were drilled with spud mud to 1017 m and KCl polymer mud from 1017 m to TD.

Thinly developed Late Jurassic sandstones were encountered, which proved to be water wet. In 6205/3-1 one conventional core was cut in the Åsgard Formation, from 4220 to 4228.4 m. In 6205/3-1 R a total of six cores were cut in Jurassic sediments in the interval 4332 - 5263 m. RFTs were attempted but only one formation pressure and one fluid sample (4337.1 m) were obtained. Well 6205/3-1 R was plugged and abandoned as a dry hole with shows on 30 November 1990.

Testing

One production test was performed over the perforated interval 4324.1 - 4344.1 m. Only water was produced to surface during the test. However, gas was brought to surface when reversing out the tubing contents and samples were taken.

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	4332.0	4340.0	[m]
2	4449.0	4452.0	[m]
3	4787.0	4789.5	[m]
4	4963.0	4980.6	[m]

5	5016.0	5021.6	[m]
6	5252.0	5262.8	[m]

Total core sample length [m]	47.4
Cores available for sampling?	YES

Core photos


4220-4225m


4225-4227m


4332-4337m


4337-4340m


4449-4452m


4787-4789m


4963-4968m

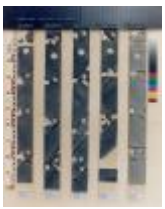

4968-4973m


4973-4978m


4978-4981m


5016-5021m


5021-5255m


5255-5260m


5260-5263m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
4293.0	[m]	SWC	HYDRO
4320.0	[m]	DC	RRI
4323.0	[m]	SWC	HYDRO
4330.0	[m]	DC	RRI
4332.3	[m]	C	HYDRO
4336.5	[m]	C	HYDRO
4380.0	[m]	DC	RRI
4390.0	[m]	DC	RRI

4400.0	[m]	DC	RRI
4410.0	[m]	DC	RRI
4420.0	[m]	DC	RRI
4430.0	[m]	SWC	HYDRO
4430.0	[m]	DC	RRI
4437.0	[m]	SWC	HYDRO
4440.0	[m]	DC	RRI
4441.0	[m]	SWC	HYDRO
4449.8	[m]	C	HYDRO
4450.0	[m]	DC	RRI
4450.7	[m]	C	HYDRO
4451.0	[m]	SWC	HYDRO
4451.8	[m]	C	HYDRO
4462.0	[m]	SWC	HYDRO
4480.0	[m]	SWC	HYDRO
4500.0	[m]	SWC	HYDRO
4520.0	[m]	DC	RRI
4523.0	[m]	SWC	HYDRO
4530.0	[m]	DC	RRI
4531.0	[m]	SWC	HYDRO
4538.0	[m]	SWC	HYDRO
4540.0	[m]	DC	RRI
4550.0	[m]	DC	RRI
4577.0	[m]	SWC	HYDRO
4580.0	[m]	DC	RRI
4590.0	[m]	DC	RRI
4600.0	[m]	DC	RRI
4610.0	[m]	SWC	HYDRO
4610.0	[m]	DC	RRI
4633.0	[m]	SWC	HYDRO
4677.0	[m]	SWC	HYDRO
4680.0	[m]	DC	RRI
4690.0	[m]	DC	RRI
4700.0	[m]	DC	RRI
4710.0	[m]	DC	RRI
4730.0	[m]	SWC	HYDRO
4742.0	[m]	SWC	HYDRO
4750.0	[m]	DC	RRI
4760.0	[m]	DC	RRI
4767.0	[m]	SWC	HYDRO

4770.0	[m]	DC	RRI
4777.0	[m]	SWC	HYDRO
4780.0	[m]	DC	RRI
4781.0	[m]	SWC	HYDRO
4787.7	[m]	C	HYDRO
4788.7	[m]	C	HYDRO
4789.0	[m]	C	HYDRO
4789.5	[m]	C	HYDRO
4792.0	[m]	SWC	HYDRO
4798.0	[m]	SWC	HYDRO
4801.0	[m]	SWC	HYDRO
4804.0	[m]	SWC	HYDRO
4806.0	[m]	SWC	HYDRO
4831.0	[m]	SWC	HYDRO
4844.0	[m]	SWC	HYDRO
4847.0	[m]	SWC	HYDRO
4849.0	[m]	SWC	HYDRO
4853.0	[m]	SWC	HYDRO
4859.0	[m]	SWC	HYDRO
4869.0	[m]	SWC	HYDRO
4875.0	[m]	SWC	HYDRO
4881.0	[m]	SWC	HYDRO
4888.0	[m]	SWC	HYDRO
4891.0	[m]	SWC	HYDRO
4900.0	[m]	SWC	HYDRO
4905.0	[m]	SWC	HYDRO
4913.0	[m]	SWC	HYDRO
4920.0	[m]	SWC	HYDRO
4931.0	[m]	SWC	HYDRO
4940.0	[m]	SWC	HYDRO
4943.0	[m]	SWC	HYDRO
4952.0	[m]	SWC	HYDRO
4957.0	[m]	SWC	HYDRO
4964.3	[m]	C	HYDRO
4965.5	[m]	C	HYDRO
4966.8	[m]	C	HYDRO
4968.7	[m]	C	HYDRO
4969.5	[m]	C	HYDRO
4970.3	[m]	C	HYDRO
4971.8	[m]	C	HYDRO

4972.0	[m]	C	HYDRO
4972.8	[m]	C	HYDRO
4973.5	[m]	C	HYDRO
4973.8	[m]	C	HYDRO
4976.0	[m]	C	HYDRO
4977.3	[m]	C	HYDRO
4978.2	[m]	C	HYDRO
4980.0	[m]	SWC	HYDRO
4980.2	[m]	C	HYDRO
4992.0	[m]	SWC	HYDRO
5002.0	[m]	SWC	HYDRO
5019.7	[m]	C	HYDRO
5020.6	[m]	C	HYDRO
5021.8	[m]	C	HYDRO
5031.0	[m]	SWC	HYDRO
5045.0	[m]	SWC	HYDRO
5050.0	[m]	DC	RRI
5060.0	[m]	DC	RRI
5070.0	[m]	DC	RRI
5075.0	[m]	SWC	HYDRO
5080.0	[m]	DC	RRI
5086.0	[m]	SWC	HYDRO
5090.0	[m]	DC	RRI
5102.0	[m]	SWC	HYDRO
5130.0	[m]	SWC	HYDRO
5153.0	[m]	SWC	HYDRO
5164.0	[m]	SWC	HYDRO
5196.0	[m]	SWC	HYDRO
5235.0	[m]	SWC	HYDRO
5237.0	[m]	SWC	HYDRO
5240.0	[m]	DC	RRI
5250.0	[m]	DC	RRI
5252.0	[m]	C	HYDRO
5254.0	[m]	C	HYDRO
5254.8	[m]	C	HYDRO
5255.8	[m]	C	HYDRO
5256.7	[m]	C	HYDRO
5260.0	[m]	DC	RRI
5261.3	[m]	C	HYDRO
5262.2	[m]	C	HYDRO

5262.9	[m]	C	HYDRO

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
182	NORDLAND GP
308	ROGALAND GP
308	SELE FM
1220	LISTA FM
1317	EGGA FM (INFORMAL)
1482	SHETLAND GP
1482	JORSALFARE FM
1573	KYRRE FM
2425	TRYGGVASON FM
2876	BLODØKS FM
2891	SVARTE FM
3133	CROMER KNOLL GP
3133	RØDBY FM
3179	AGAT FM
3780	SOLA FM
3956	ÅSGARD FM
4394	VIKING GP
4394	SPEKK FM
4446	NO FORMAL NAME
4466	SPEKK FM
4485	NO FORMAL NAME
4494	SPEKK FM
4777	NO FORMAL NAME
4846	SPEKK FM
4955	NO FORMAL NAME
5046	SPEKK FM
5220	NO FORMAL NAME
5236	SPEKK FM

Composite logs

Document name	Document format	Document size [MB]
1510	pdf	0.71

Geochemical information

Document name	Document format	Document size [MB]
1510_1	pdf	1.84
1510_2	pdf	1.63

Documents - older Norwegian Offshore Directorate WDSS reports and other related documents

Document name	Document format	Document size [MB]
1510_01_WDSS_General_Information	pdf	0.20
1510_02_WDSS_completion_log	pdf	0.26

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

Document name	Document format	Document size [MB]
1510_6205_3_1_R_COMPLETION_REPORT_AND_LOG	pdf	14.38

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	4324	4344	12.7

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0			36.080	138

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0					

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL CCL GR	3775	4280
CST GR	4293	5245
DEIL LSS SP GR	4935	5265
DIL LSS SP GR	4210	4420
DIL SDT SP GR	4288	4996
FMS4	4288	5268
LDL CNL AMS GR	4210	5247
LDL CNL GR	4935	5113
MWD	4300	4846
RFT	4336	4810
RFT AMS	4330	4336
RFT AMS	5012	5043
SHDT GR	4287	4998
VSP	2700	5250

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
INTERM.	9 5/8	4284.0	12 1/4	4290.0	0.00	LOT
LINER	7	5264.0	8 1/2	5264.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
553	1.43	10.0	8.0	WATER BASED	27.11.1990
4014	1.43	10.0	4.0	WATER BASED	27.11.1990
4300	1.30	13.0	4.0	DUMMY	21.09.1990
4300	1.25	7.0	4.0	DUMMY	20.09.1990
4300	1.26	12.0	4.0	WATER BASED	24.09.1990
4300	1.30	12.0	10.0	WATER BASED	24.09.1990
4316	1.43	10.0	4.0	WATER BASED	27.11.1990
4332	1.30	13.0	4.0	WATER BASED	24.09.1990
4339	1.37	13.0	6.0	WATER BASED	25.09.1990
4354	1.37	16.0	4.0	WATER BASED	26.09.1990
4401	1.37	13.0	6.0	WATER BASED	27.09.1990

4401	1.37	17.0	4.0	WATER BASED	28.09.1990
4435	1.75	15.0	6.0	WATER BASED	13.11.1990
4444	1.37	16.0	4.0	WATER BASED	02.10.1990
4451	1.37	19.0	5.0	WATER BASED	02.10.1990
4461	1.39	17.0	5.0	WATER BASED	02.10.1990
4500	1.75	16.0	4.0	WATER BASED	13.11.1990
4500	1.75	16.0	4.0	WATER BASED	13.11.1990
4500	1.75	18.0	6.0	WATER BASED	14.11.1990
4500	1.75	15.0	5.0	WATER BASED	16.11.1990
4500	1.56	12.0	5.0	WATER BASED	19.11.1990
4500	1.43	10.0	5.0	WATER BASED	19.11.1990
4500	1.43	10.0	4.0	WATER BASED	19.11.1990
4500	1.43	10.0	4.0	WATER BASED	20.11.1990
4500	0.00			WATER BASED	21.11.1990
4500	0.00			WATER BASED	22.11.1990
4500	1.43	10.0	4.0	WATER BASED	23.11.1990
4500	1.75	15.0	5.0	WATER BASED	16.11.1990
4516	1.39	15.0	7.0	WATER BASED	03.10.1990
4549	1.45	17.0	8.0	WATER BASED	04.10.1990
4592	1.50	17.0	6.0	WATER BASED	05.10.1990
4615	1.55	17.0	6.0	WATER BASED	05.10.1990
4615	1.55	17.0	6.0	WATER BASED	09.10.1990
4633	1.55	16.0	5.0	WATER BASED	09.10.1990
4694	1.55	17.0	7.0	WATER BASED	09.10.1990
4717	1.55	16.0	5.0	WATER BASED	10.10.1990
4736	1.55	16.0	5.0	WATER BASED	11.10.1990
4736	1.55	16.0	6.0	WATER BASED	12.10.1990
4790	1.62	17.0	6.0	WATER BASED	15.10.1990
4790	1.62	18.0	6.0	WATER BASED	15.10.1990
4829	1.70	19.0	6.0	WATER BASED	15.10.1990
4846	1.70	19.0	7.0	WATER BASED	16.10.1990
4860	1.70	20.0	7.0	WATER BASED	18.10.1990
4914	1.70	19.0	8.0	WATER BASED	18.10.1990
4963	1.70	19.0	8.0	WATER BASED	22.10.1990
4982	1.70	20.0	8.0	WATER BASED	22.10.1990
4982	1.70	19.0	5.0	WATER BASED	22.10.1990
4995	1.70	16.0	5.0	WATER BASED	23.10.1990
4995	1.70	16.0	5.0	WATER BASED	24.10.1990
4995	1.70	17.0	5.0	WATER BASED	22.10.1990
4995	1.70	16.0	5.0	WATER BASED	25.10.1990

5005	1.70	17.0	6.0	WATER BASED	26.10.1990
5016	1.70	15.0	5.0	WATER BASED	29.10.1990
5034	1.70	16.0	5.0	WATER BASED	29.10.1990
5069	1.76	16.0	3.0	WATER BASED	29.10.1990
5111	1.76	18.0	6.0	WATER BASED	30.10.1990
5111	1.75	18.0	6.0	WATER BASED	31.10.1990
5133	1.76	20.0	8.0	WATER BASED	01.11.1990
5160	1.75	19.0	9.0	WATER BASED	02.11.1990
5211	1.76	17.0	7.0	WATER BASED	05.11.1990
5222	1.75	20.0	8.0	WATER BASED	05.11.1990
5235	1.75	18.0	8.0	WATER BASED	05.11.1990
5252	1.75	15.0	8.0	WATER BASED	06.11.1990
5264	1.75	15.0	5.0	WATER BASED	08.11.1990
5264	1.75	14.0	5.0	WATER BASED	09.11.1990
5264	1.75	14.0	4.0	WATER BASED	13.11.1990
5264	1.75	16.0	5.0	WATER BASED	08.11.1990

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]
1510_Formation_pressure_(Formasjonstrykk)	pdf	0.28