

**General information**

Wellbore name	15/9-18
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	15/9-18
Seismic location	ST 8215 - 122 SP 636
Production licence	046
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	396-L
Drilling facility	DEEPSEA BERGEN
Drilling days	78
Entered date	16.12.1983
Completed date	02.03.1984
Release date	02.03.1986
Publication date	10.01.2010
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	23.0
Water depth [m]	97.0
Total depth (MD) [m RKB]	3622.0
Final vertical depth (TVD) [m RKB]	3621.0
Maximum inclination [°]	2.15
Bottom hole temperature [°C]	104
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	SMITH BANK FM
Geodetic datum	ED50
NS degrees	58° 21' 1.95" N
EW degrees	1° 48' 12.27" E
NS UTM [m]	6468508.49
EW UTM [m]	429961.76
UTM zone	31
NPDID wellbore	36



Wellbore history

General

Well 15/9-18 is located between the Sleipner Øst and Sleipner Vest Fields in the South Viking Graben in the North Sea.

It was designed primarily to test hydrocarbon accumulations in the Middle Jurassic Hugin Formation. Secondary objectives were Paleocene sandstones in the Heimdal and Sleipner Formations, and sandstones of Triassic age.

Operations and results

Wildcat well 15/9-18 was spudded with the semi-submersible installation Deepsea Bergen on 16 December 1983 and drilled to TD at 3622 m in the Triassic Smith Bank Fm. No major problems occurred while drilling this well, but some tight hole problems were experienced in the 12 1/4" hole section. The well was drilled with seawater gel down to 520 m and with gypsum/lignosulphonate mud from 520 m to TD.

Tertiary sands were penetrated at 866 m (Utsira Formation), 1254 m, and at 2071 m ("Frigg Fm Equivalent"). The Draupne Formation was encountered 105 m thick at 3108 m. The Hugin Formation was encountered at 3237 m. It was found hydrocarbon bearing in a 7.5 m interval from 3237.5 m and down to a coal layer at 3245.0 m but the hydrocarbons were immovable. The well did not encounter other hydrocarbon bearing intervals. Shows were however recorded further down in the Hugin Formation in the interval 3275 m to 3325 m.

Four cores were cut, two in the Paleocene and two in the Middle Jurassic sequence. Segregated FMT fluid samples were taken in the hydrocarbon bearing interval in the Hugin Formation at 3238.3 m, 3239 m, and 3240 m. All samples were reported to recover mud filtrate only, but the samples from 3240 m were analysed to contain 0.2 g petroleum hydrocarbons.

The well was permanently abandoned on 2 March 1984 as a dry well with shows.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
190.00	3622.50

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	2630.0	2632.2	[m]



2	2632.5	2645.9	[m]
3	3230.0	3248.4	[m]
4	3248.0	3266.5	[m]

Total core sample length [m]	52.5
Cores available for sampling?	YES

Core photos



2630-2632m



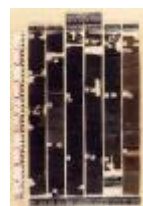
2632-2637m



2637-2642m



2642-2645m



3230-3236m



3236-3242m



3242-3248m



3248-3249m



3248-3254m



3254-3260m



3260-3266m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
2202.5	[m]	C	
2232.5	[m]	C	
2262.5	[m]	C	
2292.5	[m]	C	
2322.5	[m]	C	
2352.5	[m]	C	
2382.5	[m]	C	



2412.5	[m]	C	
2442.5	[m]	C	
2472.5	[m]	C	
2502.5	[m]	C	
2532.5	[m]	C	
2562.5	[m]	C	
2592.5	[m]	C	
2622.5	[m]	C	
2631.7	[m]	C	OD
2642.3	[m]	C	OD
2652.5	[m]	C	
2682.5	[m]	C	
2712.5	[m]	C	
2742.5	[m]	C	
2750.0	[m]	C	
2947.0	[m]	SWC	RRI
3220.0	[m]	DC	OD
3230.1	[m]	C	OD
3232.6	[m]	C	OD
3234.5	[m]	C	OD
3235.2	[m]	C	OD
3238.5	[m]	C	OD
3242.1	[m]	C	OD
3242.8	[m]	C	OD
3243.1	[m]	C	OD
3245.2	[m]	C	OD
3248.2	[m]	C	OD
3248.7	[m]	C	OD
3249.9	[m]	C	OD
3254.9	[m]	C	OD
3260.0	[m]	C	OD
3266.4	[m]	C	OD
3269.0	[m]	SWC	RRI
3298.0	[m]	SWC	RRI
3300.0	[m]	DC	OD
3313.0	[m]	SWC	RRI
3325.0	[m]	DC	OD
3329.0	[m]	SWC	RRI
3350.0	[m]	DC	OD
3367.0	[m]	SWC	RRI



3372.0	[m]	DC	OD
3400.0	[m]	DC	OD
3409.0	[m]	SWC	RRI
3420.0	[m]	SWC	RRI
3420.0	[m]	DC	OD
3440.0	[m]	DC	OD
3465.0	[m]	SWC	RRI
3584.5	[m]	SWC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
120	NORDLAND GP
866	UTSIRA FM
1210	HORDALAND GP
1254	NO FORMAL NAME
2071	NO FORMAL NAME
2291	ROGALAND GP
2291	BALDER FM
2338	SELE FM
2405	LISTA FM
2465	HEIMDAL FM
2665	TY FM
2702	SHETLAND GP
2702	EKOFISK FM
2706	TOR FM
2843	HOD FM
2931	BLODØKS FM
2993	SVARTE FM
3013	CROMER KNOLL GP
3013	RØDBY FM
3061	SOLA FM
3076	ÅSGARD FM
3108	VIKING GP
3108	DRAUPNE FM
3213	HEATHER FM
3237	VESTLAND GP
3237	HUGIN FM
3410	SLEIPNER FM



3420	NO GROUP DEFINED
3420	SKAGERRAK FM
3593	SMITH BANK FM

Geochemical information

Document name	Document format	Document size [MB]
36_1	pdf	1.06
36_2	pdf	0.74
36_3	pdf	0.96

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

Document name	Document format	Document size [MB]
36_01_WDSS_General_Information	pdf	0.18
36_02_WDSS_completion_log	pdf	0.32

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

Document name	Document format	Document size [MB]
36_01_15_9_18_Analyse_av_mudfiltrat	pdf	0.07
36_01_15_9_18_Analysis_of_HC	pdf	1.84
36_01_15_9_18_Biostrat_of_int.2000-3622.5m	pdf	20.20
36_01_15_9_18_Borehole_geophysical_data	pdf	1.63
36_01_15_9_18_Borehole_geophysical_data_encl_1	pdf	0.71
36_01_15_9_18_Borehole_geophysical_data_encl_10	pdf	0.52
36_01_15_9_18_Borehole_geophysical_data_encl_11	pdf	0.53
36_01_15_9_18_Borehole_geophysical_data_encl_12	pdf	0.54
36_01_15_9_18_Borehole_geophysical_data_encl_13	pdf	0.53
36_01_15_9_18_Borehole_geophysical_data_encl_14	pdf	0.29
36_01_15_9_18_Borehole_geophysical_data_encl_15	pdf	0.28





36 01 15 9 18 Borehole geophysical data encl 16	pdf	0.19
36 01 15 9 18 Borehole geophysical data encl 17	pdf	0.81
36 01 15 9 18 Borehole geophysical data encl 18	pdf	0.82
36 01 15 9 18 Borehole geophysical data encl 2	pdf	1.81
36 01 15 9 18 Borehole geophysical data encl 3	pdf	2.22
36 01 15 9 18 Borehole geophysical data encl 5	pdf	2.45
36 01 15 9 18 Borehole geophysical data encl 6	pdf	0.80
36 01 15 9 18 Borehole geophysical data encl 7	pdf	0.66
36 01 15 9 18 Borehole geophysical data encl 8	pdf	0.81
36 01 15 9 18 Borehole geophysical data encl 9	pdf	0.62
36 01 15 9 18 Comments to spec.core analysis	pdf	0.19
36 01 15 9 18 Completion Report & Log	pdf	30.93
36 01 15 9 18 Core gamma log	pdf	0.16
36 01 15 9 18 Final well report	pdf	14.87
36 01 15 9 18 Geochem.Analysis of 6 de-asphalted	pdf	2.38
36 01 15 9 18 Geochem.Analysis of FMT and Seal peel	pdf	2.12
36 01 15 9 18 Geological progn,pressure predicted	pdf	2.17
36 01 15 9 18 Geological progn,pressure predicted encl 1	pdf	0.19
36 01 15 9 18 Geological progn,pressure predicted encl 2	pdf	0.92
36 01 15 9 18 Post well audit	pdf	2.51
36 01 15 9 18 Recommended mud program	pdf	0.85
36 01 15 9 18 Rutine core analysis	pdf	1.14
36 01 15 9 18 Shallow gas study by Statoil	pdf	0.65
36 01 15 9 18 Shallow gas study encl 1	pdf	1.71
36 01 15 9 18 Shallow gas study encl 2	pdf	1.71
36 01 15 9 18 Shallow gas study encl 3	pdf	1.04
36 01 15 9 18 Shallow gas study encl 4	pdf	0.98
36 01 15 9 18 Shallow gas study encl 5	pdf	1.78
36 01 15 9 18 Shallow gas study encl 6	pdf	1.63





36 01 15 9 18 Shallow gas study encl 7	pdf	2.34
36 01 15 9 18 Shallow gas study encl 8	pdf	1.55
36 01 15 9 18 Special core analysis	pdf	3.07
36 01 15 9 18 Borehole geophysical data encl 4	pdf	3.92

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CAL	1500	2743
CBL VDL GR	120	2740
CBL VDL GR	200	1150
CDL CNL GR CAL	1150	3622
CDL GR CAL	499	1170
DIFL BHC AC	120	520
DLL MLL GR	3200	3300
FMT	3238	3571
GR SP CAL	499	3623
HR DIP	2275	2762
HR DIP	2742	3623
VELOCITY	750	3620

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	181.0	36	182.0	0.00	LOT
SURF.COND.	20	499.0	26	520.0	1.47	LOT
INTERM.	13 3/8	1150.0	17 1/2	1170.0	1.52	LOT
INTERM.	9 5/8	2743.0	12 1/4	2762.0	1.74	LOT
OPEN HOLE		3622.0	8 1/2	3622.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
180	1.04	100.0		WATER BASED	
330	1.08	38.0		WATER BASED	
610	1.10	45.0		WATER BASED	





705	1.14	49.0		WATER BASED	
815	1.13	52.0		WATER BASED	
1145	1.12	52.0		WATER BASED	
1175	1.13	44.0		WATER BASED	
1780	1.17	53.0		WATER BASED	
1890	1.20	53.0		WATER BASED	
2090	1.23	46.0		WATER BASED	
2800	1.24	46.0		WATER BASED	
3040	1.35	53.0		WATER BASED	
3095	1.39	55.0		WATER BASED	
3145	1.42	54.0		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]
36 Formation pressure (Formasjonstrykk)	pdf	0.22

