

**General information**

Wellbore name	6506/11-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6506/11-3
Seismic location	ST 8807-558 & SP. 620
Production licence	134
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	734-L
Drilling facility	ROSS RIG (2)
Drilling days	86
Entered date	08.07.1992
Completed date	02.10.1992
Release date	02.10.1994
Publication date	02.03.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	24.0
Water depth [m]	328.0
Total depth (MD) [m RKB]	4350.0
Final vertical depth (TVD) [m RKB]	4346.0
Bottom hole temperature [°C]	127
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	NOT FM
Geodetic datum	ED50
NS degrees	65° 13' 58.44" N
EW degrees	6° 22' 26.89" E
NS UTM [m]	7237146.88
EW UTM [m]	377273.80
UTM zone	32
NPDID wellbore	1973

**Wellbore history****General**

The well 6506/11-3 is located in the Haltenbanken region, north west of the Smørbukk area. The objectives of well 6506/11-3 were: to prove oil in the Lysing, Lange (Cretaceous) and the Rogn (Jurassic) Formation; to test the hydrocarbon potential of the Nise Formation and the Åre Formation; and to penetrate the Upper Triassic and test the reservoir potential in order to prepare for relinquishment.

Operations and results

Well 6506/11-3 was spudded with the semi-submersible installation Ross Rig on 8 July 1992 and drilled to TD at 4350 m in the Middle Jurassic Not Formation. The well was drilled with seawater and hi-vis pills down to 1020 m, with Gypsum/PAC-Polymer mud from 1020 m to 2020 m, with Gypsum/PAC/Thermopol/Ancotemp mud from 2020 m to 3717 m, and with Ancotherm mud from 3717 m to TD. Due to high pressure the well was terminated at a shallower depth than prognosis

Top Nise Formation was encountered at 2357 m and proved to be 196 m thick. It was predominantly Clay/Claystone with some thin sandstone layers, mostly in the upper part. The Lysing Formation was tested and produced water with minor amounts of gas. Only 2 m Spekk Formation was encountered and the Rogn Formation was not developed. Sandstones of the Jurassic Garn Formation were water bearing. Shows were recorded in the Lysing and Garn Formation.

Post-well geochemical screening of cores showed shales of good potential in the interval 3920 m to 3990 m across the Cenomanian ? Turonian in the Lange Formation. This may possibly be seen as an equivalent to the Blodøks Formation in the North Sea.

Ten cores were cut in the well. Core 1 was cut from 3143.5 m to 3170.5 m in the Lysing Formation. Cores 2, 3, and 4 were cut in the interval 3919 m to 3945.6 m in Upper Cenomanian ? Turonian sediments of the Lange Formation. Cores 5, 6, and 7 were cut in the interval 3976 m to 4003 m in Albian to Cenomanian sediments of the Lange Formation. Cores 8, 9, and 10 were cut in the interval 4172 m to 4224 m in the Garn Formation. Two FMT samples were taken: one at 3933.5 m TVD RKB in the Lange Formation and one at 4189.7 m TVD RKB in the Garn Formation. A thin hydrocarbon film was observed on the sample from the Lange Formation. The well was permanently abandoned on 2 October 1992 as a dry well with shows.

Testing

One DST in the interval 3122 m to 3142 m in the Lysing Formation was performed. The test flowed 482 Sm³ water and 1817 Sm³ gas per day through a 12.7 mm choke

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1030.00	4350.00

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	3143.5	3170.0	[m]
2	3919.0	3929.7	[m]
3	3930.0	3943.6	[m]
4	3943.6	3945.0	[m]
5	3976.0	3984.4	[m]
6	3986.0	3993.0	[m]
7	3993.0	4000.9	[m]
8	4172.0	4173.7	[m]
9	4174.0	4202.0	[m]
10	4202.0	4223.8	[m]

Total core sample length [m]	127.0
Cores available for sampling?	YES

Core photos

3143-3147m



3147-3151m



3151-3155m



3155-3159m



3159-3163m



3163-3167m



3167-3170m



3919-3924m



3924-3929m



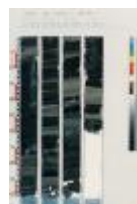
3929-3930m



3930-3935m



3935-3940m



3940-3943m



3943-3945m



3976-3981m



3981-3985m



3986-3991m



3991-3993m



3993-3998m



3998-4000m



4172-4173m



4174-4179m



4179-4184m



4184-4189m



4189-4194m



4194-4199m



4199-4202m



4202-4207m



4207-4212m



4212-4217m



4217-4222m



4222-4224m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1940.0	[m]	DC	RRI
1960.0	[m]	DC	RRI
1970.0	[m]	DC	RRI
1990.0	[m]	DC	RRI
2000.0	[m]	DC	RRI
2030.0	[m]	DC	RRI
2040.0	[m]	DC	RRI
2050.0	[m]	DC	RRI
2060.0	[m]	DC	RRI



2183.0	[m]	SWC	STATO
2186.5	[m]	SWC	STATO
2205.0	[m]	SWC	STATO
2740.0	[m]	DC	RRI
2770.0	[m]	DC	RRI
2800.0	[m]	DC	RRI
2830.0	[m]	DC	RRI
2860.0	[m]	DC	RRI
2890.0	[m]	DC	RRI
2920.0	[m]	DC	RRI
2950.0	[m]	DC	RRI
2980.0	[m]	DC	RRI
3010.0	[m]	DC	RRI
3040.0	[m]	DC	RRI
3056.0	[m]	SWC	STATO
3082.0	[m]	SWC	STATO
3107.0	[m]	SWC	STATO
3120.0	[m]	DC	RRI
3126.0	[m]	SWC	STATO
3130.0	[m]	DC	RRI
3132.0	[m]	SWC	STATO
3145.1	[m]	C	STATO
3147.6	[m]	C	STATO
3155.4	[m]	C	STATO
3158.5	[m]	C	STATO
3166.7	[m]	C	STATO
3178.0	[m]	DC	RRI
3184.0	[m]	DC	RRI
3191.0	[m]	SWC	STATO
3219.0	[m]	DC	RRI
3234.0	[m]	DC	RRI
3246.0	[m]	DC	RRI
3260.0	[m]	DC	RRI
3300.0	[m]	DC	RRI
3310.0	[m]	DC	RRI
3330.0	[m]	DC	RRI
3350.0	[m]	SWC	STATO
3360.0	[m]	DC	RRI
3380.0	[m]	DC	RRI
3400.0	[m]	DC	RRI



3420.0 [m]	DC	RRI
3440.0 [m]	DC	RRI
3460.0 [m]	DC	RRI
3480.0 [m]	DC	RRI
3500.0 [m]	DC	RRI
3520.0 [m]	DC	RRI
3540.0 [m]	DC	RRI
3560.0 [m]	DC	RRI
3580.0 [m]	DC	RRI
3600.0 [m]	DC	RRI
3620.0 [m]	DC	RRI
3640.0 [m]	DC	RRI
3661.0 [m]	SWC	STATO
3680.0 [m]	DC	RRI
3700.0 [m]	DC	RRI
3720.0 [m]	DC	RRI
3730.0 [m]	DC	RRI
3750.0 [m]	DC	RRI
3760.0 [m]	DC	RRI
3780.0 [m]	DC	RRI
3790.0 [m]	DC	RRI
3805.0 [m]	DC	RRI
3815.0 [m]	DC	RRI
3825.0 [m]	DC	RRI
3840.0 [m]	DC	RRI
3855.0 [m]	DC	RRI
3870.0 [m]	DC	RRI
3885.0 [m]	DC	RRI
3900.0 [m]	DC	RRI
3915.0 [m]	DC	RRI
3919.6 [m]	C	STATO
3927.6 [m]	C	STATO
3933.5 [m]	C	STATO
3942.8 [m]	C	STATO
3945.4 [m]	C	STATO
3960.0 [m]	DC	RRI
3979.1 [m]	C	STATO
3981.4 [m]	C	STATO
3985.3 [m]	C	STATO
4000.8 [m]	C	STATO



4020.0 [m]	DC	RRI
4040.0 [m]	DC	RRI
4050.0 [m]	DC	RRI
4070.0 [m]	DC	RRI
4080.0 [m]	DC	RRI
4100.0 [m]	DC	RRI
4110.0 [m]	DC	RRI
4130.0 [m]	DC	RRI
4168.5 [m]	SWC	STATO
4171.5 [m]	SWC	STATO
4186.8 [m]	C	STATO
4190.9 [m]	C	STATO
4199.8 [m]	C	STATO
4201.5 [m]	C	STATO
4215.9 [m]	C	STATO
4259.0 [m]	SWC	STATO
4295.5 [m]	SWC	STATO
4296.0 [m]	SWC	STATO
4301.0 [m]	SWC	STATO
4332.0 [m]	SWC	STATO
4344.0 [m]	DC	RRI
4344.0 [m]	SWC	STATO
4350.0 [m]	DC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
352	NORDLAND GP
1527	KAI FM
1944	HORDALAND GP
1944	BRYGGE FM
2049	ROGALAND GP
2049	TARE FM
2139	TANG FM
2191	SHETLAND GP
2191	SPRINGAR FM
2357	NISE FM
2553	KVITNOS FM
3121	CROMER KNOLL GP



3121	LYSING FM
3202	LANGE FM
4142	LYR FM
4167	VIKING GP
4167	SPEKK FM
4169	FANGST GP
4169	GARN FM
4330	NOT FM

Composite logs

Document name	Document format	Document size [MB]
1973	pdf	0.57

Geochemical information

Document name	Document format	Document size [MB]
1973_1	pdf	0.52
1973_2	pdf	19.32

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

Document name	Document format	Document size [MB]
1973_01_WDSS_General_Information	pdf	0.62
1973_02_WDSS_completion_log	pdf	0.24

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

Document name	Document format	Document size [MB]
1973_6506_11_3_COMPLETION_REPORT_AND_LOG	pdf	23.01

Drill stem tests (DST)





Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	3120	3142	12.7

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0		3.000	34.000	105

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0		1817			

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DIFL ACL GR SP	450	4349
DIFL ACL GR SP	3695	4063
DIFL ACL GR SP	4123	4217
DIFL CDL ACL GR SP	1009	1420
DIFL DAC GR	2004	3716
DIFL ZDL ACL GR SP	1350	1908
DIPLOG	3702	4057
DIPLOG	4024	4350
DLL MLL SL	3695	4019
FMT GR	3044	3090
FMT GR	4174	4206
FMT GR	4206	4323
MWD	420	2020
MWD - CDR	3782	4350
MWD - CDR CDN	2020	3782
SWC	2183	3701
SWC	4143	4347
VSP	1980	4330
ZDENS CN GR	3695	4063
ZDENS CN GR	4126	4215

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	411.0	36	414.0	0.00	LOT
INTERM.	20	1012.0	22	1014.0	1.61	LOT
INTERM.	16	2005.0	20	2010.0	1.75	LOT
INTERM.	9 5/8	3700.0	12 1/4	3717.0	2.10	LOT
OPEN HOLE		4350.0	8 1/2	4350.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1186	1.12	17.0		WATER BASED	
1667	1.35	21.0		WATER BASED	
2015	1.50	29.0		WATER BASED	
2016	1.50	35.0		WATER BASED	
2020	1.52	32.0		WATER BASED	
2300	1.70	29.0		WATER BASED	
3024	1.70	29.0		WATER BASED	
3120	1.70	29.0		WATER BASED	
3717	1.70	29.0		WATER BASED	
3798	1.70	25.0		WATER BASED	
3919	1.70	27.0		WATER BASED	
3923	1.75	24.0		WATER BASED	
3937	1.92	31.0		WATER BASED	
3944	1.77	27.0		WATER BASED	
3976	1.84	30.0		WATER BASED	
3987	1.84	28.0		WATER BASED	
4003	1.84	30.0		WATER BASED	
4063	1.92	34.0		WATER BASED	
4100	1.88	34.0		WATER BASED	
4174	1.88	37.0		WATER BASED	
4196	1.88	33.0		WATER BASED	
4202	1.88	35.0		WATER BASED	
4224	1.88	26.0		WATER BASED	
4255	1.90	49.0		WATER BASED	
4310	1.90	27.0		WATER BASED	
4323	1.90	36.0		WATER BASED	
4324	1.90	35.0		WATER BASED	



4350	1.93	33.0		WATER BASED	
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Thin sections at the Norwegian Offshore Directorate

Depth	Unit
3144.48	[m]
3145.84	[m]
3148.68	[m]
3149.49	[m]
3152.64	[m]
3159.16	[m]
3423.50	[m]
3937.00	[m]
3937.25	[m]

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]
1973 Formation pressure (Formasjonstrykk)	pdf	0.27

