

**General information**

Wellbore name	6706/11-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6706/11-1
Seismic location	3D- ST 9603- INLINE 3840& CROSSLINE 2090
Production licence	217
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	907-L
Drilling facility	OCEAN ALLIANCE
Drilling days	162
Entered date	12.10.1997
Completed date	22.03.1998
Release date	22.03.2000
Publication date	15.11.2001
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	26.0
Water depth [m]	1238.0
Total depth (MD) [m RKB]	4317.0
Final vertical depth (TVD) [m RKB]	4306.0
Bottom hole temperature [°C]	115
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	LANGE FM
Geodetic datum	ED50
NS degrees	67° 4' 24.77" N
EW degrees	6° 27' 47.7" E
NS UTM [m]	7442018.41
EW UTM [m]	389745.19
UTM zone	32
NPDID wellbore	3202

**Wellbore history****General**

Well 6706/11-1 was drilled on the Ægir prospect on the Vema Dome in the north of the Vøring basin. The main objectives for the well were to test the hydrocarbon potential of the Ægir prospect and to obtain data to allow for efficient exploration of the remaining licence area.

Operations and results

The original well was spudded and drilled to a total depth of 1988 m MD RT, with the 30" casing at 1340 m and 20" casing at 1685 m, respectively. This well was abandoned due to technical problems (no BOP test was obtained). The well was named 6706/11-1Z. The 1st respud was drilled to 1740 m MD RT. The 30" and the 20" casings were set at 1340 m and 1711 m, respectively. Technical problems were again the reason for abandoning this well. A bootstrap tool used to tighten the conductor and the 20" casings got stuck. The 1st re-spud was named 6706/11-1Y. The second and successful re-spud was named 6706/11-1. The well was drilled with seawater and hi-vis pills down to 1648 m and with Barasilc silicate mud from 1648 m to TD. In the section from 2255 m to 3476 m GEM GP (glycols) were added to the Barasilc mud. The Brygge Formation consisted mainly of ooze sediments with very low densities (bulk density of 1.4 g/cm³ was measured). Small fractures/ faults were interpreted in the intersection between Paleocene sandstone and the Springar Formation. It was assumed that the ooze lithology as well as unstable and fractured formation were the predominant cause of the drilling problems that were encountered in the top section of the wellbores.

The dominant part of the sediments proved to be of Cretaceous age. The well intersects a single fault just below the base Quaternary and several faults at base Tertiary level. Both the Nise Sandstone 1 and the Nise Sandstone 2 formations were developed. No significant amounts of hydrocarbons were encountered only small amounts of very dry gas in an MDT sample from 3740 m. Five cores were cut in the NISE Formation. The well was permanently plugged and abandoned 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]
1660.00	4311.00

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	2297.0	2304.2	[m]
2	2306.5	2323.0	[m]
3	3107.5	3112.0	[m]



4	3112.0	3136.7	[m]
5	3744.0	3749.6	[m]

Total core sample length [m]	58.5
Cores available for sampling?	YES

Core photos

2297-2302m



2302-2304m



2306-2311m



2311-2316m



2316-2321m



2321-2323m



3107-3212m



3112-3117m



3117-3122m



3122-3127m



3127-3232m



3132-3136m



3744-3749m



3749-3750m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1660.0	[m]	DC	RRI
1670.0	[m]	DC	RRI
1690.0	[m]	DC	RRI
1700.0	[m]	DC	RRI
1720.0	[m]	DC	RRI
1730.0	[m]	DC	RRI
1750.0	[m]	DC	RRI
1760.0	[m]	DC	RRI



1780.0 [m]	DC	RRI
1790.0 [m]	DC	RRI
1810.0 [m]	DC	RRI
1830.0 [m]	DC	RRI
1840.0 [m]	DC	RRI
1860.0 [m]	DC	RRI
1870.0 [m]	DC	RRI
1885.0 [m]	DC	RRI
1900.0 [m]	DC	RRI
1920.0 [m]	DC	RRI
1930.0 [m]	DC	RRI
1955.0 [m]	DC	RRI
1960.0 [m]	DC	RRI
1975.0 [m]	DC	RRI
1990.0 [m]	DC	RRI
2005.0 [m]	DC	RRI
2020.0 [m]	DC	RRI
2035.0 [m]	DC	RRI
2050.0 [m]	DC	RRI
2065.0 [m]	DC	RRI
2085.0 [m]	DC	RRI
2090.0 [m]	DC	RRI
2110.0 [m]	DC	RRI
2125.0 [m]	DC	RRI
2140.0 [m]	DC	RRI
2155.0 [m]	DC	RRI
2170.0 [m]	DC	RRI
2185.0 [m]	DC	RRI
2203.0 [m]	DC	RRI
2215.0 [m]	DC	RRI
2230.0 [m]	DC	RRI
2245.0 [m]	DC	RRI
2255.0 [m]	DC	RRI
2266.0 [m]	SWC	OD
2275.0 [m]	DC	RRI
2286.5 [m]	SWC	OD
2295.5 [m]	SWC	OD
2297.7 [m]	C	RRI
2299.0 [m]	C	RRI
2301.0 [m]	C	RRI



2303.0 [m]	C	RRI
2307.3 [m]	C	RRI
2317.5 [m]	C	RRI
2321.0 [m]	C	RRI
2336.0 [m]	DC	RRI
2352.0 [m]	DC	RRI
2366.0 [m]	DC	RRI
2378.0 [m]	DC	RRI
2396.0 [m]	DC	RRI
2408.0 [m]	DC	RRI
2426.0 [m]	DC	RRI
2442.5 [m]	SWC	OD
2450.0 [m]	DC	RRI
2501.0 [m]	DC	RRI
2522.0 [m]	DC	RRI
2534.0 [m]	DC	RRI
2539.5 [m]	SWC	OD
2546.0 [m]	DC	RRI
2555.0 [m]	DC	RRI
2576.0 [m]	DC	RRI
2588.0 [m]	DC	RRI
2602.5 [m]	SWC	OD
2623.0 [m]	SWC	OD
2636.0 [m]	DC	RRI
2654.0 [m]	SWC	OD
2661.0 [m]	SWC	OD
2684.0 [m]	DC	RRI
2692.0 [m]	SWC	OD
2696.0 [m]	DC	RRI
2715.5 [m]	SWC	OD
2722.3 [m]	SWC	OD
2741.5 [m]	SWC	OD
2749.1 [m]	SWC	OD
2756.0 [m]	DC	RRI
2768.0 [m]	DC	RRI
2790.0 [m]	SWC	OD
2801.0 [m]	DC	RRI
2815.5 [m]	SWC	OD
2828.0 [m]	DC	RRI
2843.0 [m]	DC	RRI



2876.0 [m]	DC	RRI
2894.0 [m]	DC	RRI
2900.0 [m]	SWC	OD
2917.0 [m]	SWC	OD
2933.0 [m]	DC	RRI
2943.0 [m]	SWC	OD
2948.0 [m]	DC	RRI
2966.0 [m]	DC	RRI
2981.0 [m]	DC	RRI
2996.0 [m]	DC	RRI
3006.0 [m]	SWC	OD
3026.0 [m]	DC	RRI
3038.0 [m]	DC	RRI
3050.0 [m]	SWC	OD
3071.0 [m]	DC	RRI
3088.0 [m]	SWC	OD
3092.0 [m]	DC	RRI
3102.0 [m]	SWC	OD
3108.4 [m]	C	RRI
3111.0 [m]	C	RRI
3114.0 [m]	C	RRI
3118.0 [m]	C	RRI
3121.5 [m]	C	RRI
3126.0 [m]	C	RRI
3128.0 [m]	C	RRI
3132.0 [m]	C	RRI
3136.3 [m]	C	RRI
3146.0 [m]	DC	RRI
3158.0 [m]	SWC	OD
3176.0 [m]	DC	RRI
3187.2 [m]	SWC	OD
3189.0 [m]	SWC	OD
3200.0 [m]	DC	RRI
3212.0 [m]	DC	RRI
3215.0 [m]	SWC	OD
3230.0 [m]	DC	RRI
3259.0 [m]	SWC	OD
3260.0 [m]	DC	RRI
3280.0 [m]	SWC	OD
3300.0 [m]	SWC	OD



3308.0 [m]	DC	RRI
3323.0 [m]	DC	RRI
3324.0 [m]	SWC	OD
3337.0 [m]	SWC	OD
3353.0 [m]	SWC	OD
3371.0 [m]	DC	RRI
3382.0 [m]	SWC	OD
3408.0 [m]	SWC	OD
3419.0 [m]	SWC	OD
3449.0 [m]	SWC	OD
3453.0 [m]	SWC	OD
3461.0 [m]	DC	RRI
3469.2 [m]	SWC	OD
3476.0 [m]	DC	RRI
3483.0 [m]	SWC	OD
3491.0 [m]	DC	RRI
3505.0 [m]	SWC	OD
3518.0 [m]	DC	RRI
3533.0 [m]	DC	RRI
3534.0 [m]	SWC	OD
3552.0 [m]	DC	RRI
3564.0 [m]	SWC	OD
3579.0 [m]	SWC	OD
3592.3 [m]	SWC	OD
3604.0 [m]	SWC	OD
3615.0 [m]	DC	RRI
3624.0 [m]	SWC	OD
3644.0 [m]	DC	RRI
3647.5 [m]	C	RRI
3656.0 [m]	C	RRI
3665.0 [m]	SWC	OD
3686.0 [m]	DC	RRI
3699.0 [m]	DC	RRI
3716.0 [m]	DC	RRI
3734.5 [m]	SWC	OD
3745.5 [m]	C	RRI
3749.0 [m]	C	RRI
3750.0 [m]	C	RRI
3751.5 [m]	SWC	OD
3760.0 [m]	DC	RRI



3770.0 [m]	DC	RRI
3791.0 [m]	DC	RRI
3794.0 [m]	SWC	OD
3806.0 [m]	DC	RRI
3821.0 [m]	DC	RRI
3833.0 [m]	DC	RRI
3854.0 [m]	SWC	OD
3863.0 [m]	DC	RRI
3874.0 [m]	SWC	OD
3881.0 [m]	DC	RRI
3898.0 [m]	DC	RRI
3909.0 [m]	SWC	OD
3923.0 [m]	DC	RRI
3949.5 [m]	SWC	OD
3960.0 [m]	DC	RRI
3979.0 [m]	SWC	OD
3990.0 [m]	SWC	OD
4009.0 [m]	SWC	OD
4026.0 [m]	C	RRI
4074.0 [m]	SWC	OD
4124.0 [m]	SWC	OD
4133.0 [m]	DC	RRI
4142.0 [m]	DC	RRI
4142.0 [m]	SWC	OD
4197.5 [m]	SWC	OD
4217.5 [m]	SWC	OD
4231.3 [m]	SWC	OD
4238.0 [m]	SWC	OD
4245.0 [m]	SWC	OD
4247.1 [m]	SWC	OD
4252.0 [m]	SWC	OD
4262.5 [m]	SWC	OD
4276.0 [m]	SWC	OD
4287.5 [m]	SWC	OD
4296.0 [m]	SWC	OD
4317.0 [m]	SWC	OD

Lithostratigraphy



Top depth [mMD RKB]	Lithostrat. unit
1264	NORDLAND GP
1264	NAUST FM
1446	HORDALAND GP
1446	BRYGGE FM
1670	ROGALAND GP
1744	SHETLAND GP
1744	SPRINGAR FM
2060	NISE FM
2283	DELFIN FM (INFORMAL)
3005	NISE FM
3101	DELFIN FM (INFORMAL)
3469	NISE FM
3865	KVITNOS FM
4138	CROMER KNOLL GP
4138	LYSING FM
4221	LANGE FM

Composite logs

Document name	Document format	Document size [MB]
3202	pdf	0.62

Geochemical information

Document name	Document format	Document size [MB]
3202_1	pdf	1.06
3202_2	pdf	2.30
3202_3	pdf	0.37
3202_4	pdf	1.03

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

Document name	Document format	Document size [MB]
3202_6706_11_1_COMPLETION_LOG	pdf	3.51





3202 6706 11 1 COMPLETION REPORT	pdf	46.50
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Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL GR	1550	1980
CST GR	2266	4142
DIR	1264	1343
DPR PWD	1341	1641
DPR PWD	1844	4317
DSI LDT NGT	1908	2220
FMI GR	2275	4231
MDT GR	2287	3193
MDT GR	3102	4215
PEX HALS DSI NGT	2243	3320
PEX HALS DSI NGT	3200	4229
PEX HALS DSI NGT	3700	4315
PWD - GR RES DIR	1660	1924
RFT GR	2288	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	1340.0	36	1343.0	0.00	LOT
SURF.COND.	20	1431.0	26	1445.0	1.15	LOT
LINER	16	1908.0	17 1/2	1911.0	1.26	LOT
LINER	9 5/8	2246.0	14 3/4	2250.0	1.36	LOT
OPEN HOLE		4317.0	8 1/2	4317.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1264	1.02			spud mud	
1341	1.05			spud mud	
1641	1.13	6.0	4.5	barasilc	
1907	1.11	6.0	4.0	barasilc	





1933	1.20	22.0	9.5	sea water	
2246	1.26	27.5	12.0	barasilc	
4317	1.26	27.5	12.0	barasilc	

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]
3202 Formation pressure (Formasjonstrykk)	pdf	0.29

