



General information





Wellbore name	7119/12-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	BARENTS SEA
Discovery	7119/12-3
Well name	7119/12-3
Seismic location	738 - 232 SP 676
Production licence	060
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	376-L
Drilling facility	DYVI DELTA
Drilling days	116
Entered date	20.05.1983
Completed date	12.09.1983
Release date	12.09.1985
Publication date	11.02.2005
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS/CONDENSATE
Discovery wellbore	YES
1st level with HC, age	JURASSIC
1st level with HC, formation	STØ FM
Kelly bushing elevation [m]	29.0
Water depth [m]	211.0
Total depth (MD) [m RKB]	3314.0
Final vertical depth (TVD) [m RKB]	3308.0
Maximum inclination [°]	7
Bottom hole temperature [°C]	136
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	NORDMELA FM
Geodetic datum	ED50
NS degrees	71° 14' 20.18" N
EW degrees	19° 44' 37.92" E
NS UTM [m]	7904727.31
EW UTM [m]	454909.86
UTM zone	34
NPDID wellbore	17



Wellbore history

General

The primary objective of wildcat 7119/12-3 was to test possible hydrocarbon accumulations in sandstones of Middle to Lower Jurassic age. Gas and condensate were discovered in the sandstone sequences. Planned TD was 3765 m.

Operations and results

Exploration well 7119/12-3 was spudded with the semi-submersible installation Dyvi Delta on 20 May 1982 and drilled to TD at 3314 m in the Early Jurassic Nordmela Formation. A total of 121 days was spent on this well including testing and a 9.5 days seamen's strike. The time estimate was 106 days. No major problems occurred due to drilling. The well was drilled using spud mud down to 303 m, with gel/seawater from 303 m to 716 m, with gypsum/polymer from 716 m to 1618 m, and with gel/lignosulphonate from 1618 m to TD.

Hydrocarbon accumulations were discovered in sandstone sequences between 3144 - 3285 m in the Stø Formation. From log evaluation the interval contained 118 m net sand. The gas/water contact at 3285 m is based on the log evaluation. Due to very tight and hard formation only two RFT pressure points were obtained out of 16 attempts (seal failures). Organic geochemical analyses found only poor source rock potential in the well. Shales in the Late Jurassic Hekkingen Formation from 3026 m to 3107 m had high TOC levels in the range 3% to 9%. However, with Hydrogen Indexes only in the range 30 - 40 mg HC/g TOC in non-caved, high-TOC samples, these shales are gas prone, and can not produce any significant quantities of liquid hydrocarbons. The well is immature down to ca 2300 m and reaches oil window maturity at ca 3000 m. Three cores were cut in the sandstones of the Middle to Early Jurassic Stø Formation. The two first were cut in the interval 3145 m to 3154.85 m with 100 % recovery. The third was cut from 3250 m to 3267 m with 97 % recovery. One RFT segregated sample was taken at 3187 m. The 2 3/4 -gallon chamber was bled off on the rig. It had an opening pressure of 38.9 bar and contained 0.226 m³ of gas and 9.5 l of mud filtrate with a condensate film on the top of the filtrate. The 1-gallon chamber was drained onshore and had an opening pressure of 54 bar at 17°C. It contained 22.2 l of gas and 3.525 l mud filtrate.

The well was permanently abandoned on 12 September 1983 as a gas/condensate discovery.

Testing

One DST was performed. The interval from 3185 m to 3195 m in the Stø Formation was perforated and production tested. The test flowed 956 900 Sm³ /day of gas with 15.2 Sm³ /day of condensate through a 64/64" choke. The gas contained 12.4 % CO₂. The permeability of the tested zone was estimated to 17.42 mD with an average porosity of 5.3 % and an average water saturation of 28.9 %. After the DST three runs with cased hole RFT was performed. The result from these was bad due to tight formation or sealing failures.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
310.00	3315.00



Cuttings available for sampling?	YES
----------------------------------	-----

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	3145.0	3148.3	[m]
2	3148.3	3154.9	[m]
3	3250.0	3266.5	[m]

Total core sample length [m]	26.4
Cores available for sampling?	YES

Core photos



3145-3148m



3148-3154m



3256-3262m



3250-3256m



3262-3266m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
310.0	[m]	DC	RRI
330.0	[m]	DC	RRI
350.0	[m]	DC	RRI
370.0	[m]	DC	RRI
390.0	[m]	DC	RRI
410.0	[m]	DC	RRI
430.0	[m]	DC	RRI
450.0	[m]	DC	RRI
470.0	[m]	DC	RRI
490.0	[m]	DC	RRI
510.0	[m]	DC	RRI
530.0	[m]	DC	RRI
550.0	[m]	DC	RRI
570.0	[m]	DC	RRI



590.0 [m]	DC	RRI
610.0 [m]	DC	RRI
630.0 [m]	DC	RRI
650.0 [m]	DC	RRI
670.0 [m]	DC	RRI
690.0 [m]	DC	RRI
710.0 [m]	DC	RRI
730.0 [m]	DC	RRI
750.0 [m]	SWC	RRI
770.0 [m]	DC	RRI
790.0 [m]	DC	RRI
810.0 [m]	DC	RRI
817.0 [m]	SWC	RRI
830.0 [m]	DC	RRI
850.0 [m]	DC	RRI
870.0 [m]	DC	RRI
890.0 [m]	SWC	RRI
915.0 [m]	SWC	RRI
930.0 [m]	DC	RRI
945.0 [m]	SWC	RRI
960.0 [m]	DC	RRI
975.0 [m]	DC	RRI
990.0 [m]	DC	RRI
1005.0 [m]	DC	RRI
1016.0 [m]	SWC	RRI
1030.0 [m]	DC	RRI
1045.0 [m]	DC	RRI
1060.0 [m]	DC	RRI
1070.0 [m]	DC	RRI
1086.0 [m]	SWC	RRI
1100.0 [m]	DC	RRI
1130.0 [m]	DC	RRI
1145.0 [m]	DC	RRI
1180.0 [m]	DC	RRI
1195.0 [m]	DC	RRI
1205.0 [m]	DC	RRI
1212.0 [m]	SWC	RRI
1225.0 [m]	DC	RRI
1240.0 [m]	DC	RRI
1255.0 [m]	DC	RRI



1270.0 [m]	DC	RRI
1285.0 [m]	DC	RRI
1295.0 [m]	DC	RRI
1309.0 [m]	SWC	RRI
1325.0 [m]	DC	RRI
1340.0 [m]	DC	RRI
1355.0 [m]	DC	RRI
1363.0 [m]	SWC	RRI
1380.0 [m]	DC	RRI
1395.0 [m]	DC	RRI
1410.0 [m]	DC	RRI
1425.0 [m]	DC	RRI
1441.0 [m]	SWC	RRI
1455.0 [m]	DC	RRI
1470.0 [m]	DC	RRI
1495.0 [m]	DC	RRI
1495.0 [m]	SWC	RRI
1510.0 [m]	DC	RRI
1525.0 [m]	DC	RRI
1540.0 [m]	DC	RRI
1555.0 [m]	DC	RRI
1575.0 [m]	SWC	RRI
1595.0 [m]	DC	RRI
1600.0 [m]	DC	RRI
1615.0 [m]	DC	RRI
1625.0 [m]	DC	RRI
1630.0 [m]	DC	RRI
1645.0 [m]	DC	RRI
1660.0 [m]	DC	RRI
1675.0 [m]	DC	RRI
1690.0 [m]	DC	RRI
1695.0 [m]	DC	RRI
1705.0 [m]	DC	RRI
1720.0 [m]	DC	RRI
1735.0 [m]	DC	RRI
1750.0 [m]	DC	RRI
1765.0 [m]	DC	RRI
1780.0 [m]	DC	RRI
1795.0 [m]	DC	RRI
1810.0 [m]	DC	RRI



1825.0 [m]	DC	RRI
1835.0 [m]	SWC	RRI
1840.0 [m]	DC	RRI
1855.0 [m]	DC	RRI
1870.0 [m]	DC	RRI
1885.0 [m]	DC	RRI
1895.0 [m]	DC	RRI
1900.0 [m]	DC	RRI
1915.0 [m]	DC	RRI
1930.0 [m]	DC	RRI
1945.0 [m]	DC	RRI
1960.0 [m]	DC	RRI
1975.0 [m]	DC	RRI
1990.0 [m]	DC	RRI
1995.0 [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
2080.0 [m]	DC	RRI
2095.0 [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
2195.0 [m]	DC	RRI
2200.0 [m]	DC	RRI
2208.0 [m]	SWC	RRI
2215.0 [m]	DC	RRI
2230.0 [m]	DC	RRI
2245.0 [m]	DC	RRI
2260.0 [m]	DC	RRI
2260.0 [m]	SWC	RRI
2275.0 [m]	DC	RRI
2290.0 [m]	DC	RRI
2293.5 [m]	SWC	RRI
2297.5 [m]	SWC	RRI



2305.0	[m]	DC	RRI
2320.0	[m]	DC	RRI
2335.0	[m]	DC	RRI
2348.0	[m]	SWC	RRI
2350.0	[m]	DC	RRI
2365.0	[m]	DC	RRI
2380.0	[m]	DC	RRI
2395.0	[m]	DC	RRI
2397.5	[m]	SWC	RRI
2400.0	[m]	SWC	RRI
2410.0	[m]	DC	RRI
2425.0	[m]	DC	RRI
2440.0	[m]	DC	RRI
2450.0	[m]	SWC	RRI
2450.0	[m]	DC	RRI
2455.0	[m]	DC	RRI
2470.0	[m]	DC	RRI
2480.0	[m]	DC	RRI
2489.0	[m]	SWC	RRI
2495.0	[m]	DC	RRI
2510.0	[m]	DC	RRI
2525.0	[m]	DC	RRI
2542.5	[m]	SWC	RRI
2550.0	[m]	DC	RRI
2555.0	[m]	DC	RRI
2570.0	[m]	DC	RRI
2591.0	[m]	SWC	RRI
2600.0	[m]	DC	RRI
2615.0	[m]	DC	RRI
2630.0	[m]	DC	RRI
2645.0	[m]	DC	RRI
2650.0	[m]	SWC	RRI
2650.0	[m]	DC	RRI
2660.0	[m]	DC	RRI
2687.0	[m]	SWC	RRI
2705.0	[m]	DC	RRI
2712.0	[m]	SWC	RRI
2735.0	[m]	DC	RRI
2750.0	[m]	DC	RRI
2755.0	[m]	SWC	RRI



2765.0	[m]	DC	RRI
2780.0	[m]	DC	RRI
2795.0	[m]	DC	RRI
2810.0	[m]	DC	RRI
2825.0	[m]	DC	RRI
2850.0	[m]	DC	RRI
2855.0	[m]	DC	RRI
2870.0	[m]	DC	RRI
2900.0	[m]	DC	RRI
2915.0	[m]	DC	RRI
2930.0	[m]	DC	RRI
2950.0	[m]	DC	RRI
2955.0	[m]	DC	RRI
2960.0	[m]	DC	RRI
2965.0	[m]	DC	RRI
2975.0	[m]	DC	RRI
2980.0	[m]	DC	RRI
3005.0	[m]	DC	RRI
3035.0	[m]	DC	RRI
3050.0	[m]	DC	RRI
3080.0	[m]	DC	RRI
3102.0	[m]	SWC	RRI
3110.0	[m]	DC	RRI
3123.0	[m]	SWC	RRI
3140.0	[m]	DC	RRI
3155.0	[m]	DC	RRI
3170.0	[m]	DC	RRI
3200.0	[m]	DC	RRI
3300.0	[m]	DC	RRI
3314.0	[m]	C	RRI

Oil samples at the Norwegian Offshore Directorate

Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
DST	TEST1	3185.00	3195.00		03.09.1983 - 13:15	YES

**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
240	NORDLAND GP
442	SOTBAKKEN GP
442	TORSK FM
1202	NYGRUNNEN GP
1202	KVEITE FM
1456	ADVENTDALEN GP
1456	KOLMULE FM
2715	KOLJE FM
2953	KNURR FM
3026	HEKKINGEN FM
3107	FUGLEN FM
3144	KAPP TOSCANA GP
3144	STØ FM
3299	NORDMELA FM

Composite logs

Document name	Document format	Document size [MB]
17	pdf	0.52

Geochemical information

Document name	Document format	Document size [MB]
17_1	pdf	2.69

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

Document name	Document format	Document size [MB]
17_01_WDSS_General_Information	pdf	0.17
17_02_WDSS_completion_log	pdf	0.31





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

Document name	Document format	Document size [MB]
17_01_Completion_Report	pdf	15.64
17_02_Completion_log	pdf	1.50

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	3185	3195	25.4

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

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0	17	957000	0.797	0.722	

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL	450	1603
CBL VDL	1000	3136
CBL VDL	2800	3234
CST	700	1618
CST	1629	3118
CST	2293	2790
CST	2815	3135
CST	3165	3307
DLL GR	3136	3315
DLL GR	3136	3315
HDT	1603	3144
ISF BHC GR SP CAL	240	1617
ISF BHC MSFL GR SP CAL	1603	3315
LDL CNL GR	302	709





LDL CNL GR	3136	3315
LDL GR	700	3142
RFT	3147	3283
SHDT	3136	3315
VELOCITY	840	3314

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	302.0	36	303.5	0.00	LOT
SURF.COND.	20	700.0	26	716.0	1.76	LOT
INTERM.	13 3/8	1603.0	17 1/2	1618.0	1.90	LOT
INTERM.	9 5/8	3135.0	12 1/4	3140.0	2.06	LOT
LINER	7	3314.0	8 1/2	3314.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
716	1.25	45.0	36.0	spud mud	
1510	1.15	50.0	25.0	water based	
1860	1.35	51.0	13.0	water based	
2372	1.47	52.0	18.0	water based	
2800	1.65	51.0	15.0	water based	
3005	1.65	56.0	18.0	water based	
3144	1.72	60.0	14.0	water based	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
3265.60	[m]
3253.85	[m]
3154.80	[m]
3147.90	[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]
17 Formation pressure (Formasjonstrykk)	pdf	0.18

