General information

Wellbore name	7117/9-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	BARENTS SEA
Well name	7117/9-1
Seismic location	79409 SP 128
Production licence	063
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	323-L
Drilling facility	TREASURE SCOUT
Drilling days	88
Entered date	20.04.1982
Completed date	16.07.1982
Release date	16.07.1984
Publication date	17.12.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	23.0
Water depth [m]	261.0
Total depth (MD) [m RKB]	3200.0
Final vertical depth (TVD) [m RKB]	3196.0
Maximum inclination [°]	7.5
Bottom hole temperature [°C]	112
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	KOLMULE FM
Geodetic datum	ED50
NS degrees	71° 22' 51.05'' N
EW degrees	17° 56' 5.76'' E
NS UTM [m]	7922625.97
EW UTM [m]	604554.55
UTM zone	33
NPDID wellbore	49

Wellbore history

General

The wildcat 7117/9-1 was the first well to be drilled in the western part of the Troms I area. It is located on the western margin of the Tromsø Basin close to the Senja High. The primary objectives of the well were to test two possible sandstone reservoirs of assumed Late Cretaceous age. Flat spots indicating fluid contacts were noted in each of these two target horizons. A secondary objective was to test sandstones of assumed Middle to Early Jurassic age. Planned TD was 2500 m in sediments of Triassic age.

Operations and results

The location survey showed the area to be covered with iceberg scars with depths from l m to 10 m. The dominant direction of these scars is ENE-WSW and most of them are filled with sand and silt. The quaternary sediments were about 280 m thick and layered in three main zones. There were no indications of shallow gas in the area.

Exploration well 7117/9-1 was spudded with the semi-submersible installation Treasure Scout on 20 April 1982. Due to excessive hole deviation while drilling to 303 m the rig had to be moved to respud the well on 24 April. In this attempt high torque in extremely hard top layers caused the drill string to twist off at 299 m. The third hole was spudded on 30 April. The drilling progressed without further problems. The last section was drilled with 8 3/8" bit and the well reached TD at 3200 m in Early Cretaceous (Middle Albian to ?Aptian) clay stone. The well was drilled with seawater and hi-vis pills down to 348 m, with seawater/bentonite from 348 m to 817 m, and with gypsum / lignosulphonate from 817 m to 1220 m. From 1220 m the mud was changed to a gel lignosulphonate system as the reactive clays disappeared and the rest of the well was drilled with this mud system.

The more shallow of the two Late Cretaceous target reservoirs was found to be a low velocity clay stone interval of Paleocene age, between 1277 m and 1328.5 m. The flat spot (at 1.4 sec TWT) could be due to horizontal bands of amorphous silica (chert) within the claystones, as seen in the core cut between 1355 m and 1370 m. The deepest of the Late Cretaceous targets turned out to be a Paleocene clay stone interval without reservoir properties. The flat spot (at 1.7 sec TWT) was not seen on wire line logs or as a change in lithology. It may reflect a similar feature as the one at 1.4 sec, but no core was taken in this interval to support this. The secondary objective interpreted as Middle to Early Jurassic sediments were found to be Cretaceous silty claystones at 1903 m, dated as Cenomanian to Albian. Three sandstone intervals were encountered in the upper part of the well. Thin Pliocene sandstone beds, 2-4 m thick were encountered in the interval 840-870 m. 11 m thick Pliocene sandstone was penetrated between 1026-1037 m. In Oligocene to Eocene a net sandstone thickness of 46 m was encountered in the interval 1139 m to 1196 m. These sandstones were all water bearing and no structural closure was mapped at these levels. The seismic reflector originally interpreted as top Jurassic proved to be an unconformity at base Paleocene level and is seen on logs at 1809 m. Another unconformity, at Cenomanian level, is evident on the logs at 1875 m.

In a few cuttings samples between 2310 and 2475 m (Cenomanian ? Albian) traces of very poor shows were reported from siltstones and rare sandstones. These shows were described as generally no direct fluorescence except for a trace of yellow white fluorescence at 2395 m and 2408 m, trace to 20% slow to fast streaming, bluish white to yellow white fluorescence cut. No visible cut or residue was detected. There was no increase in ditch gas recordings associated with these shows, which are rated very poor. One core was cut from 1355 m to 1370 m. No fluid sample was taken.

The well was permanently abandoned on 16 July 1982 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]
350.00	3200.00

Cuttings available for sampling?	NO

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	1355.0	1365.6	[m]

Total core sample length [m]	10.6
Cores available for sampling?	YES

Core photos


1355-1358m


1358-1360m


1360-1363m


1363-1365m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
814.0	[m]	SWC	IKU
826.0	[m]	SWC	IKU
840.0	[m]	SWC	IKU
855.0	[m]	SWC	IKU
870.0	[m]	SWC	IKU
886.0	[m]	SWC	IKU
906.9	[m]	SWC	IKU
923.0	[m]	SWC	IKU
935.0	[m]	SWC	IKU

950.0	[m]	DC	OD
950.0	[m]	SWC	IKU
965.0	[m]	SWC	IKU
980.0	[m]	SWC	IKU
995.0	[m]	SWC	IKU
1010.0	[m]	SWC	IKU
1027.0	[m]	SWC	IKU
1040.0	[m]	SWC	IKU
1055.0	[m]	SWC	IKU
1068.0	[m]	SWC	IKU
1080.0	[m]	SWC	IKU
1110.0	[m]	SWC	IKU
1123.0	[m]	SWC	IKU
1140.0	[m]	SWC	IKU
1148.0	[m]	SWC	IKU
1155.0	[m]	SWC	IKU
1198.0	[m]	SWC	IKU
1205.0	[m]	SWC	IKU
1232.0	[m]	SWC	IKU
1290.0	[m]	SWC	IKU
1330.0	[m]	SWC	IKU
1365.5	[m]	C	IKU
1395.0	[m]	SWC	IKU
1425.0	[m]	SWC	IKU
1460.0	[m]	SWC	IKU
1486.0	[m]	SWC	IKU
1521.0	[m]	SWC	IKU
1560.0	[m]	SWC	IKU
1745.0	[m]	SWC	IKU
1776.0	[m]	SWC	IKU
1795.0	[m]	SWC	IKU
1805.0	[m]	SWC	IKU
1816.0	[m]	SWC	IKU
1825.0	[m]	SWC	IKU
1840.0	[m]	SWC	IKU
1875.0	[m]	SWC	IKU
1887.0	[m]	SWC	IKU
1922.0	[m]	SWC	IKU
1935.0	[m]	SWC	IKU
1980.0	[m]	SWC	IKU

2017.0	[m]	SWC	IKU
2031.0	[m]	SWC	IKU
2090.0	[m]	SWC	IKU
2100.0	[m]	SWC	IKU
2113.0	[m]	SWC	IKU
2128.0	[m]	SWC	IKU
2130.0	[m]	SWC	IKU
2141.0	[m]	SWC	IKU
2165.0	[m]	SWC	IKU
2180.0	[m]	SWC	IKU
2190.0	[m]	SWC	IKU
2206.0	[m]	SWC	IKU
2223.0	[m]	SWC	IKU
2236.0	[m]	SWC	IKU
2255.0	[m]	SWC	IKU
2270.0	[m]	SWC	IKU
2280.0	[m]	SWC	IKU
2290.0	[m]	SWC	IKU
2308.0	[m]	SWC	IKU
2327.0	[m]	SWC	IKU
2347.0	[m]	SWC	IKU
2359.0	[m]	SWC	IKU
2365.0	[m]	SWC	IKU
2381.0	[m]	SWC	IKU
2391.0	[m]	SWC	IKU
2400.0	[m]	SWC	IKU
2410.0	[m]	SWC	IKU
2420.0	[m]	SWC	IKU
2432.0	[m]	SWC	IKU
2443.0	[m]	SWC	IKU
2456.0	[m]	SWC	IKU
2472.0	[m]	SWC	IKU
2485.0	[m]	SWC	IKU
2498.0	[m]	SWC	IKU
2510.0	[m]	SWC	IKU
2520.0	[m]	SWC	IKU
2537.0	[m]	SWC	IKU
2553.0	[m]	SWC	IKU
2560.0	[m]	DC	OD
2562.0	[m]	SWC	IKU

2570.0	[m]	DC	OD
2573.0	[m]	SWC	IKU
2580.0	[m]	DC	OD
2580.0	[m]	SWC	IKU
2590.0	[m]	DC	OD
2591.0	[m]	SWC	IKU
2600.0	[m]	DC	OD
2605.0	[m]	SWC	IKU
2610.0	[m]	DC	OD
2620.0	[m]	DC	OD
2622.0	[m]	SWC	IKU
2630.0	[m]	DC	OD
2645.0	[m]	SWC	IKU
2660.0	[m]	SWC	IKU
2674.0	[m]	SWC	IKU
2686.0	[m]	SWC	IKU
2700.0	[m]	SWC	IKU
2726.0	[m]	SWC	IKU
2748.0	[m]	SWC	IKU
2805.0	[m]	SWC	IKU
2824.0	[m]	SWC	IKU
2859.0	[m]	SWC	IKU
2883.0	[m]	SWC	IKU
2897.0	[m]	SWC	IKU
2920.0	[m]	SWC	IKU
2940.0	[m]	SWC	IKU
2959.0	[m]	SWC	IKU
2985.0	[m]	SWC	IKU
3015.0	[m]	SWC	IKU
3034.0	[m]	SWC	IKU
3045.0	[m]	SWC	IKU
3070.0	[m]	SWC	IKU
3088.0	[m]	SWC	IKU
3110.0	[m]	SWC	IKU
3127.0	[m]	SWC	IKU
3140.0	[m]	SWC	IKU
3155.0	[m]	SWC	IKU
3166.0	[m]	SWC	IKU

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
284	NORDLAND GP
1139	SOTBAKKEN GP
1139	TORSK FM
1809	NYGRUNNEN GP
1809	KVEITE FM
1875	ADVENTDALEN GP
1875	KOLMULE FM

Composite logs

Document name	Document format	Document size [MB]
49	pdf	0.42

Geochemical information

Document name	Document format	Document size [MB]
49_1	pdf	0.87

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

Document name	Document format	Document size [MB]
49_01_WDSS_General_Information	pdf	0.16
49_02_WDSS_completion_log	pdf	0.20

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

Document name	Document format	Document size [MB]
49_7117_9_1_COMPLETION_REPORT_AND_LOG	pdf	10.68

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL	852	1204
CBL VDL	1000	2688
CST	814	1215
CST	1232	2562
CST	1290	2700
CST	2090	2573
CST	2711	3194
HDT CYBERDIP	800	3197
ISF LSS GR	284	3197
LDT CNL GR CAL	1204	3194
LDT GR CAL	345	1217
VSP	350	2705
VSP	2500	3195

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	345.0	36	348.0	0.00	LOT
SURF.COND.	20	800.0	26	817.0	1.59	LOT
INTERM.	13 3/8	1204.0	17 1/2	1220.0	1.60	LOT
INTERM.	9 5/8	2688.0	12 1/4	2707.0	1.86	LOT
OPEN HOLE		3200.0	8 3/8	3200.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
346	1.05			WATER BASED	
817	1.24	45.0		WATER BASED	
1223	1.30	50.0		WATER BASED	
2100	1.33	66.0		WATER BASED	
2400	1.48	55.0		WATER BASED	
2707	1.49	60.0		WATER BASED	
3200	1.53	60.0		WATER BASED	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
1357.70	[m]
1364.14	[m]