

Well no : 7120/ 2-01 Operator : HYDRO

Coordinates : 71 58 57.94 N UTM coord. : 7987305
20 28 35.09 E 481923

Licence no : 109 Permit no : 464

Rig : TREASURE SCOUT Rig type : SEMI-SUB.

Contractor : WILHELMSSEN OFFSHORE SERVICES

Bottom hole temperature : 85 deg.C Elev. KB : 23 M

Spud. date : 85.05.05 Water depth : 387 M

Compl. date : 85.10.29 Total depth : 3495 M

Spud. class : WILDCAT Form. at TD : BASEMENT

Compl. class : P&A. OIL DISCOVERY Prod. form : PERM/CARB

Seisloca : N H 8412 - 402 SP. 460

LICENSEES

10.000000 ESSO NORGE A.S
15.000000 NORSK HYDRO PRODUKSJON A.S
15.000000 MOBIL EXPLORATION NORWAY INC.
50.000000 DEN NORSKE STATS OLJESELSKAP A.S
10.000000 TENNECO OIL NORWAY A/S

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3
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CONDUCTOR	30	474.0	36	475.0	
SURF.COND.	20	601.0	26	915.0	
INTERM.	16	1038.0	22	1050.0	
INTERM.	13 3/8	1846.0	17 1/2	1862.0	1.63
INTERM.	9 5/8	2474.0	12 1/4	2500.0	2.10
OPEN HOLE			8 1/2	3495.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	1960.0 - 1972.4	12.4	95.4	EARLY PERMIAN
2	1973.0 - 1988.4	15.4	100.0	EARLY PERMIAN
3	1988.4 - 2004.0	15.6	100.0	EARLY PERMIAN
4	2006.0 - 2024.0	17.8	99.0	EARLY PERMIAN
5	2024.0 - 2041.5	17.5	100.0	PERMIAN/CARBONIFEROUS
6	2047.0 - 2050.0	2.8	93.3	LATE CARBONIFEROUS
7	2050.0 - 2068.5	18.5	100.0	LATE CARBONIFEROUS
8	2068.5 - 2076.0	7.3	98.0	E/M CARBONIFEROUS
9	2104.0 - 2104.5	0.5	100.0	E/M CARBONIFEROUS
10	2126.0 - 2126.3	0.3	100.0	E/M CARBONIFEROUS
11	2127.0 - 2132.6	5.6	100.0	E/M CARBONIFEROUS
12	2133.6 - 2142.6	9.0	100.0	E/M CARBONIFEROUS
13	2142.6 - 2152.0	8.6	92.0	E/M CARBONIFEROUS
14	2152.0 - 2170.0	18.0	100.0	E/M CARBONIFEROUS
15	2170.0 - 2188.8	18.8	100.0	E/M CARBONIFEROUS
16	2188.8 - 2207.0	17.9	98.6	E/M CARBONIFEROUS
17	2207.0 - 2225.7	18.7	100.0	E/M CARBONIFEROUS
18	2225.7 - 2243.0	17.3	100.0	E/M CARBONIFEROUS
19	2637.0 - 2645.9	8.9	100.0	E/M CARBONIFEROUS
20	3478.0 - 3480.5	2.5	100.0	EARLY CARBONIFEROUS

MUD PROPERTIES

Depth below KB meter	Mud weight g/cm ³	Plastic viscosity mPa.s	Mud type
410.000	1.00		WATER BASED
432.000	1.05		WATER BASED
616.000	1.55		WATER BASED
772.000	1.06	12.0	WATER BASED
915.000	1.10	12.0	WATER BASED
1050.000	1.11	9.0	WATER BASED
1054.000	1.12	11.0	WATER BASED
1179.000	1.14	11.0	WATER BASED
1481.000	1.15	17.0	WATER BASED
1606.000	1.14	17.0	WATER BASED
1866.000	1.18	15.0	WATER BASED
2008.000	1.15	16.0	WATER BASED
2040.000	1.14	16.0	WATER BASED
2108.000	1.15	18.0	WATER BASED
2127.000	1.14	17.0	WATER BASED
2585.000	1.16	21.0	WATER BASED
2816.000	1.14	18.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	2157.300 - 2177.300	50.8			
2.0	2119.800 - 2139.800	25.4			
3.0	2048.300 - 2108.300	25.4			
4.0	1943.700 - 2030.700	25.4			

RECOVERY

Test no.	Oil Sm ³ /d	Gas Sm ³ /d	Oil grav. g/cm ³	Gas grav. rel. air	GOR m ³ /m ³
1.0					
2.0					
3.0					
4.0	5		0.839		

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	480 - 3502	1120
Wet Samples	485 - 3502	805

SHALLOW GAS

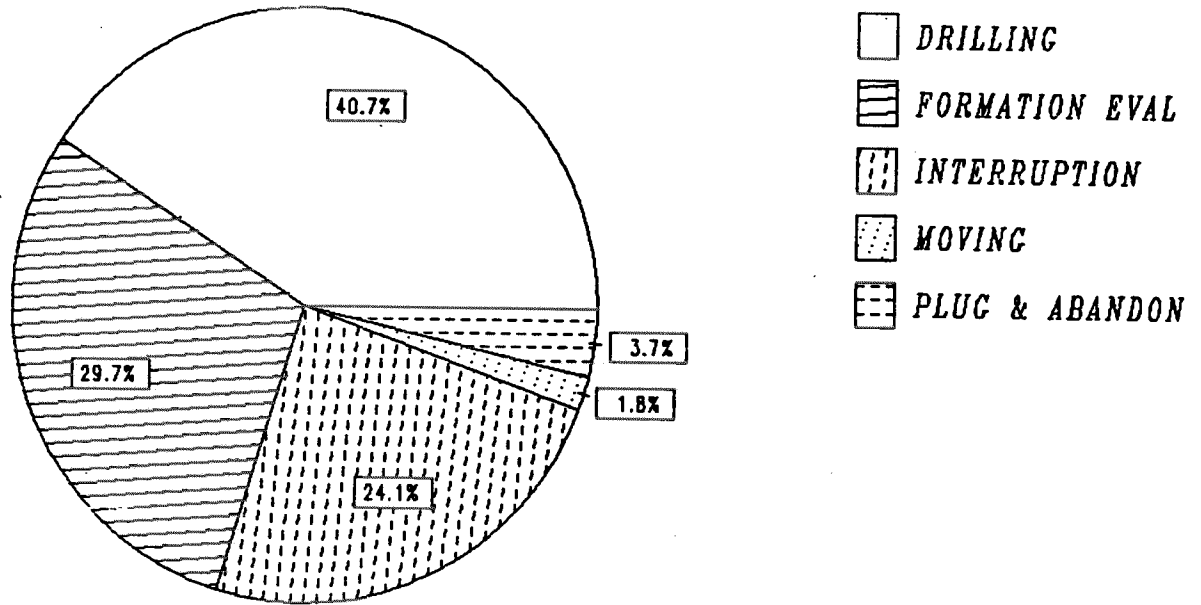
Interval below KB	REMARKS
618 - 622 M	

AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500
ISF LSS MSFL GR	475 - 909	X	X
ISF LSS	865 - 1045	X	X
ISF LSS	1038 - 1679	X	X
ISF LSS	1620 - 1857	X	X
ISF LSS	1848 - 2091	X	X
ISF LSS	2050 - 2488	X	X
ISF LSS	2473 - 3501	X	X
LDL CNL	475 - 910	X	X
LDL CNL	873 - 1047	X	X
LDL CNL	1038 - 1680	X	X
LDL CNL	1620 - 1858	X	X
LDL CNL NGS	1846 - 2091	X	X
LDL CNL NGS	2050 - 2488	X	X
LDL CNL NGS	2473 - 3502	X	X
DLL MSFL	1846 - 2087	X	X
DLL MSFL	1938 - 2251	X	X
CALIPER	602 - 1050	X	X
CDM AP	744 - 1047	X	X
CDM AP	1038 - 1857	X	X
CDM AP	1847 - 2482	X	X
CDM AP	2475 - 3500	X	X
SHDT	747 - 1047	X	
SHDT	1038 - 1858	X	
SHDT	1846 - 2483	X	
SHDT	2473 - 3502	X	
NGS PLAYBACK	1846 - 2091	X	X
NGS PLAYBACK	2050 - 2478	X	X
NGS PLAYBACK	2473 - 3492	X	X
DRILLING DATA PRESSURE	410 - 3502		1:5000
TEMPERATURE DATA	410 - 3502		1:5000
PRESSURE EVALUATION	410 - 3502		1:5000
DXC NXB	410 - 3502		1:5000
RFT HP	618 - 620		
RFT	1937 - 2081	X	
RFT	2066 - 2468	X	
CBL VDL	484 - 1017	X	
CBL VDL	990 - 1846	X	
CBL VDL	1850 - 2488	X	
MUD	410 - 3502		X
VELOCITY	475 - 3501		X
(+ Synthetic Seismogram, Geogram,			6 stk)
(+ V.S.P., Rigshot, 10 cm/s,			11 stk)
(+ V.S.P., Multiple offset, 10 cm/s			14 stk)

DAILY DRILLING REPORT SYSTEM

Main operation : 7120/02-01



Total : 4294.50 hours

Main operation	Minutes	Hours	% of total
DRILLING	104850	1747.50	40.69
FORMATION EVAL	76410	1273.50	29.65
INTERRUPTION	62040	1034.00	24.08
MOVING	4770	79.50	1.85
PLUG & ABANDON	9600	160.00	3.73

MAIN OPERATIONS WELL : 7120/02-01
 MAIN OPERATION : DRILLING

Sub operation	Min	Hrs	% of total
BOP ACTIVITIES	6810	113.50	6.49
BOP/WELLHEAD EQ	3690	61.50	3.52
CASING	10470	174.50	9.99
CIRC/COND	3120	52.00	2.98
DRILL	38970	649.50	37.17
HOLE OPEN	2130	35.50	2.03
OTHER	2970	49.50	2.83
PRESS DETECTION	570	9.50	0.54
REAM	4110	68.50	3.92
SURVEY	840	14.00	0.80
TRIP	19440	324.00	18.54
UNDERREAM	11610	193.50	11.07
WAIT	120	2.00	0.11
Total	104850	1747.50	100.00

MAIN OPERATION : FORMATION EVAL

Sub operation	Min	Hrs	% of total
CIRC SAMPLES	180	3.00	0.24
CIRC/COND	1560	26.00	2.04
CORE	11580	193.00	15.16
DST	40500	675.00	53.00
LOG	12420	207.00	16.25
OTHER	2220	37.00	2.91
TRIP	7950	132.50	10.40
Total	76410	1273.50	100.00

MAIN OPERATION : INTERRUPTION

Sub operation	Min	Hrs	% of total
FISH	8160	136.00	13.15
LOST CIRC	5820	97.00	9.38
MAINTAIN/REP	8550	142.50	13.78
OTHER	29430	490.50	47.44
WAIT	9990	166.50	16.10
WELL CONTROL	90	1.50	0.15
Total	62040	1034.00	100.00

MAIN OPERATION : PLUG & ABANDON

Sub operation	Min	Hrs	% of total
CEMENT PLUG	1530	25.50	15.94
CIRC/COND	510	8.50	5.31
CUT	330	5.50	3.44
EQUIP RECOVERY	3570	59.50	37.19
MECHANICAL PLUG	420	7.00	4.37
OTHER	600	10.00	6.25
PERFORATE	330	5.50	3.44
SQUEEZE	330	5.50	3.44
TRIP	1140	19.00	11.87
WAIT	840	14.00	8.75
Total	9600	160.00	100.00

MAIN OPERATION : MOVING

Sub operation	Min	Hrs	% of total
ANCHOR	3690	61.50	77.36
TRANSIT	1080	18.00	22.64
Total	4770	79.50	100.00

Well History 7120/ 2-1.

General:

Wildcat well 7120/2-1 was drilled partly on the Loppa High and the Hammerfest Basin in the Northern part of the block, a previous nonexplored province. The primary object of this well was to test the hydrocarbon bearing layers of Lower-Middle Carboniferous rocks, which are truncated by a major base Landinian unconformity. Secondary objectives were to test the reservoir potential of Middle Triassic sediments deposited on the Landinian unconformity, penetrate the Permo-Carboniferous wedge pinching out above the lower Middle Carboniferous. There might be a possibility of reservoir development in this interval. One of the commitments in the licence, is to drill into Devonian rocks or to a depth of 4000 m.

Operations:

The well was spudded 5 May 1985 by W. Wilhelmsen semi-submersible rig Treasure Scout, and completed 29 October 1985, at a depth of 3495 m. Due to a work conflict, the well was secured with four cementplugs which after the conflict were drilled out. Indications of hydrocarbons were encountered in limestones of Permian/ Carboniferous age. The drillstring penetrated a pocket of shallow gas between 618 m and 622 m as predicted by shallow seismic reflectors. Indications of upper Triassic deposits were encountered from 640 m, upper Carnian age. Minor hydrocarbon shows were encountered in several Sst layers.

The Triassic Sst prognosed to 1850 m was not found, and must be missing or deposited at a deeper level. At 1945 m a Lmst with extremely high Gamma Ray was encountered, and cores were taken in the interval 1960 m and 2243 m RKB. The cores were bleeding oil from fractures and vugs. Metamorphic Rocks were encountered at 3470 m, and in cores. They are described as Nepheline Syenite. Below 2140 m the rocks are dominated by dolomitic Lmst with thin sand- and slate layers.

Testing:

The well is tested in four different intervals, and display tight rocks which was treated with acid. Due to low formational pressure nitrogen was used to lift formation liquid to the surface.

GEOLOGICAL TOPS

WELL: 7120/02-01

	Depth m (RKB)
<i>Nordland Group</i>	410,0
<i>Sotbakken Group</i>	476,0
<i>Torsk Fm</i>	476,0
<i>Ingøydjupet Group</i>	613,0
<i>Snadd Fm</i>	613,0
<i>Kobbe Fm</i>	1933,0
<i>Bear Island Group Eqv</i>	1945,0
<i>Kapp Duner Fm</i>	1945,0
<i>Kapp Hanna Fm</i>	2023,0
<i>Kapp Kåre Fm</i>	2105,0
<i>Landnørdingsvika Fm</i>	2230,0
 <i>TD=</i>	 3495,0