

Well no : 7120/01-01R2

Operator : SHELL

Coordinates : 71 55 00.83 N
20 18 7.13 E

UTM coord. : 7980020 N
475816 E

Licence no : 108

Permit no : 480

Rig : BORGNY DOLPHIN

Rig type : SEMI-SUB.

Contractor : DOLPHIN SERVICES A/S

Bottom hole temperature : deg.C

Elev. KB : 25 M

Spud. date : 86.03.18

Water depth : 342 M

Compl. date : 86.07.21

Total depth : 4003 M

Spud. class : WILDCAT

Form. at TD : PERMIAN

Compl. class : P&A. DRY HOLE

Prod. form :

Seisloca : TNGS 83 - 142 SP. 2891

LICENSEES

5.000000 ELF AQUITAINE NORGE A/S
5.000000 NORSK HYDRO PRODUKSJON A.S
40.000000 A/S NORSKE SHELL
50.000000 DEN NORSKE STATS OLJESELSKAP A.S

CASING AND LEAK OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm ³
LINER	7	3707.0	8 1/2	3725.0	1.80

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	3186.0 - 3194.8	8.7	98.9	
2	4000.0 - 4003.0	2.3	76.7	

MUD PROPERTIES

Depth below KB meter	Mud weight g/cm ³	Viscosity	Mud type
2672.000	1.41	15.0	WATER BASED
2694.000	1.40	15.0	WATER BASED
2698.000	1.41	17.0	WATER BASED
2770.000	1.40	11.0	WATER BASED
2804.000	1.41	12.0	WATER BASED
2810.000	1.25	12.0	WATER BASED
2974.000	1.40	10.0	WATER BASED
3001.000	1.41	12.0	WATER BASED
3093.000	1.40	11.0	WATER BASED

3152.000	1.39	11.0	WATER BASED
3185.000	1.40	11.0	WATER BASED
3185.000	1.39	10.0	WATER BASED
3359.000	1.40	14.0	WATER BASED
3426.000	1.41	12.0	WATER BASED
3590.000	1.40	14.0	WATER BASED
3598.000	1.25	12.0	WATER BASED
3609.000	1.40	13.0	WATER BASED
3707.000	1.25	8.0	WATER BASED
3725.000	1.40	14.0	WATER BASED
3725.000	1.39	9.0	WATER BASED
3725.000	1.40	9.0	WATER BASED
3989.000	1.25	12.0	WATER BASED
4000.000	1.10	12.0	WATER BASED
4003.000	1.25	12.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no.	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	2810.000 - 2855.000	25.4	0.0	4500.0	0.0
2.0	2607.000 - 2665.000	6.4	0.0	3684.0	0.0
Test temperature: 93.3 °C					

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	0	0	0.000	0.000	0

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTING	500-3982	1200
WET SAMPLES	500-3982	1200

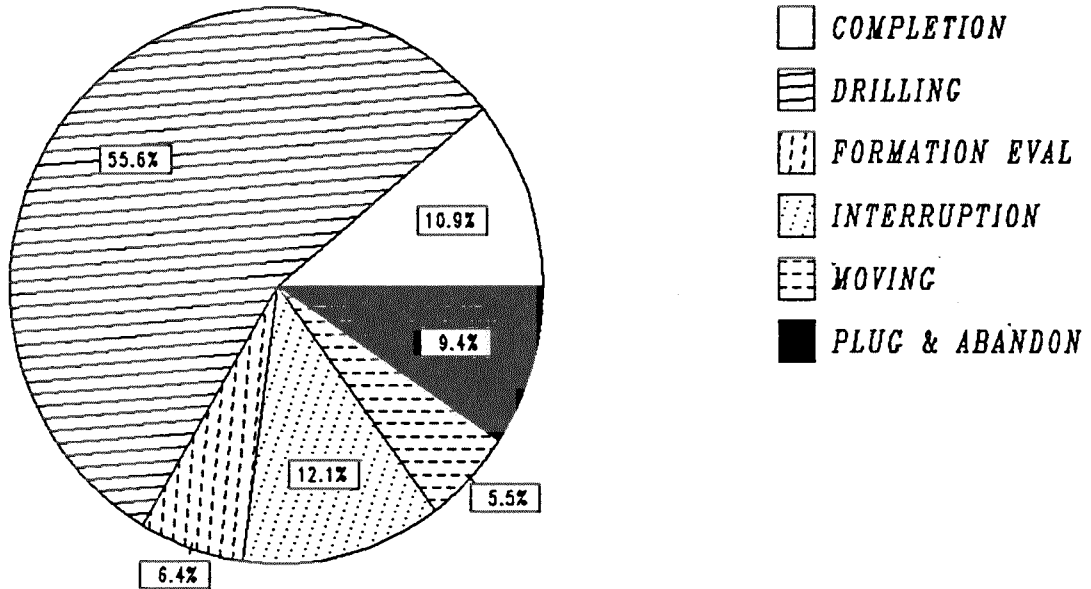
AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500 DIV
DIFL LS BHC AC GR	360.000 - 800.000	X	X
DIFL LS BHC AC	701.000 - 1110.000	X	X
DIFL LS BHC AC	1050.000 - 2105.000	X	X
DIFL LS BHC AC	2015.000 - 2422.000	X	X
DIFL LS BHC AC	2387.000 - 2610.000	X	X
ISF LSS	2413.000 - 3187.000	X	X
ISF LSS	3187.000 - 3729.000	X	X
ISF LSS	3729.000 - 4002.0000	X	X
CDL CNL	460.000 - 800.000	X	X
CDL CNL	726.000 - 1109.000	X	X
CDL CNL	1093.000 - 2096.000	X	X
CDL CNL	2074.000 - 2421.000	X	X
CDL CNL	2414.000 - 2479.000	X	X

CDL CNL	2405.000 - 2609.000	X	X
LDL CNL	2413.000 - 3188.000	X	X
LDL CNL	3188.000 - 3730.000	X	X
LDL CNL	3730.000 - 4003.000	X	X
DLL MSFL	2414.000 - 2479.000	X	X
DLL MSFL	2413.000 - 3185.000	X	X
DLL MSFL	3184.000 - 3727.000	X	X
DLL MSFL	3727.000 - 3999.000	X	X
CDM AP/SHDT MSD	2412.000 - 2837.000	X	X
CDM AP/SHDT MSD	2853.000 - 3193.000	X	X
CDM AP/SHDT MSD	3150.000 - 3730.000	X	X
CDM AP/SHDT MSD	3711.000 - 4003.000	X	X
SHDT	2413.000 - 3188.000	X	
SHDT	3188.000 - 3730.000	X	
SHDT	3730.000 - 4003.000	X	
SDT NGT	2413.000 - 3156.000	X	
SDT NGT	3184.000 - 3726.000	X	
SDT NGT	3726.000 - 3999.000	X	
FMT	2136.000 - 2412.000		X
FMT	2425.000 - 2466.000		X
RFT	2630.000 - 3087.000	X	100
RFT	3351.000 - 3715.000	X	X
NGS	2413.000 - 3176.000	X	
NGS	3184.000 - 3718.000	X	
NGS	3726.000 - 3999.000	X	
CBL VDL AC	745.000 - 2090.000		X
CBL VDL AC	2000.000 - 2414.000	X	
CET VDL	1527.000 - 3708.000	X	X
MUD	468.000 - 4003.000		X
VELOCITY	360.000 - 3729.000	1:1000X	
(VSP,wsp, 700-3725 m			1 stk.)
(VSP,rigshot, 10-20 cm/s, plot 1-12			12 stk.)
(VSP,composite geogram display, 10-20 cm/s			4 stk.)
(Geogram, synthetic seismogram			9 stk.)

DAILY DRILLING REPORT SYSTEM

Main operations for well : 7120/01 -01 R2



Total : 3120.00 hours

Main operation	Minutes	Hours	% of total
COMPLETION	20430	340.50	10.91
DRILLING	104040	1734.00	55.58
FORMATION EVAL	11970	199.50	6.39
INTERRUPTION	22710	378.50	12.13
MOVING	10380	173.00	5.54
PLUG & ABANDON	17670	294.50	9.44

MAIN OPERATIONS FOR WELL : 7120 / 01 - 01 R2

MAIN OPERATION : COMPLETION

Sub operations	Minutes	Hrs	% of total
BOP/WELLHEAD EQ	180	3.00	0.88
CIRC/COND	3780	63.00	18.50
COMPL STRING	6726	112.10	32.92
FLOW	2589	43.15	12.67
OTHER	660	11.00	3.23
STIMULATE	630	10.50	3.08
WIRE LINE	5865	97.75	28.71
Total	20430	340.50	100.00

MAIN OPERATION : DRILLING

Sub operations	Minutes	Hrs	% of total
BOP ACTIVITIES	1680	28.00	1.61
BOP/WELLHEAD EQ	8610	143.50	8.28
CASING	6210	103.50	5.97
CIRC/COND	3750	62.50	3.60
DRILL	52950	882.50	50.89
OTHER	300	5.00	0.29
PRESS DETECTION	870	14.50	0.84
REAM	690	11.50	0.66
SURVEY	1710	28.50	1.64
TRIP	27270	454.50	26.21
Total	104040	1734.00	100.00

MAIN OPERATION : FORMATION EVAL

Sub operations	Minutes	Hrs	% of total
CIRC SAMPLES	240	4.00	2.01
CIRC/COND	60	1.00	0.50
CORE	1110	18.50	9.27
LOG	9090	151.50	75.94
OTHER	90	1.50	0.75
TRIP	1380	23.00	11.53
Total	11970	199.50	100.00

MAIN OPERATION : INTERRUPTION

Sub operations	Minutes	Hrs	% of total
LOST CIRC	6930	115.50	30.52
MAINTAIN/REP	4650	77.50	20.48
OTHER	7110	118.50	31.31
WAIT	4020	67.00	17.70
Total	22710	378.50	100.00

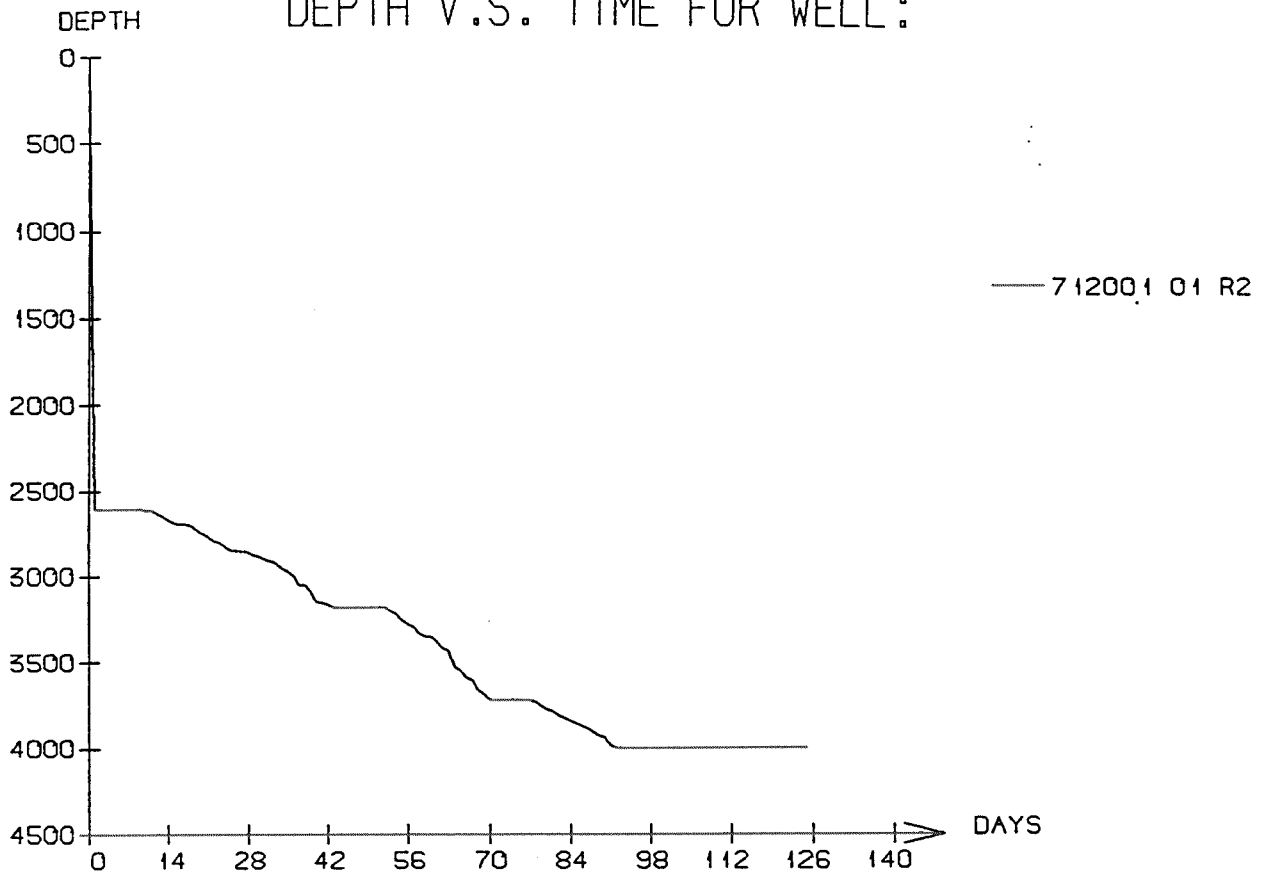
MAIN OPERATION : MOVING

Sub operations	Minutes	Hrs	% of total
ANCHOR	4620	77.00	44.51
TRANSIT	5760	96.00	55.49
Total	10380	173.00	100.00

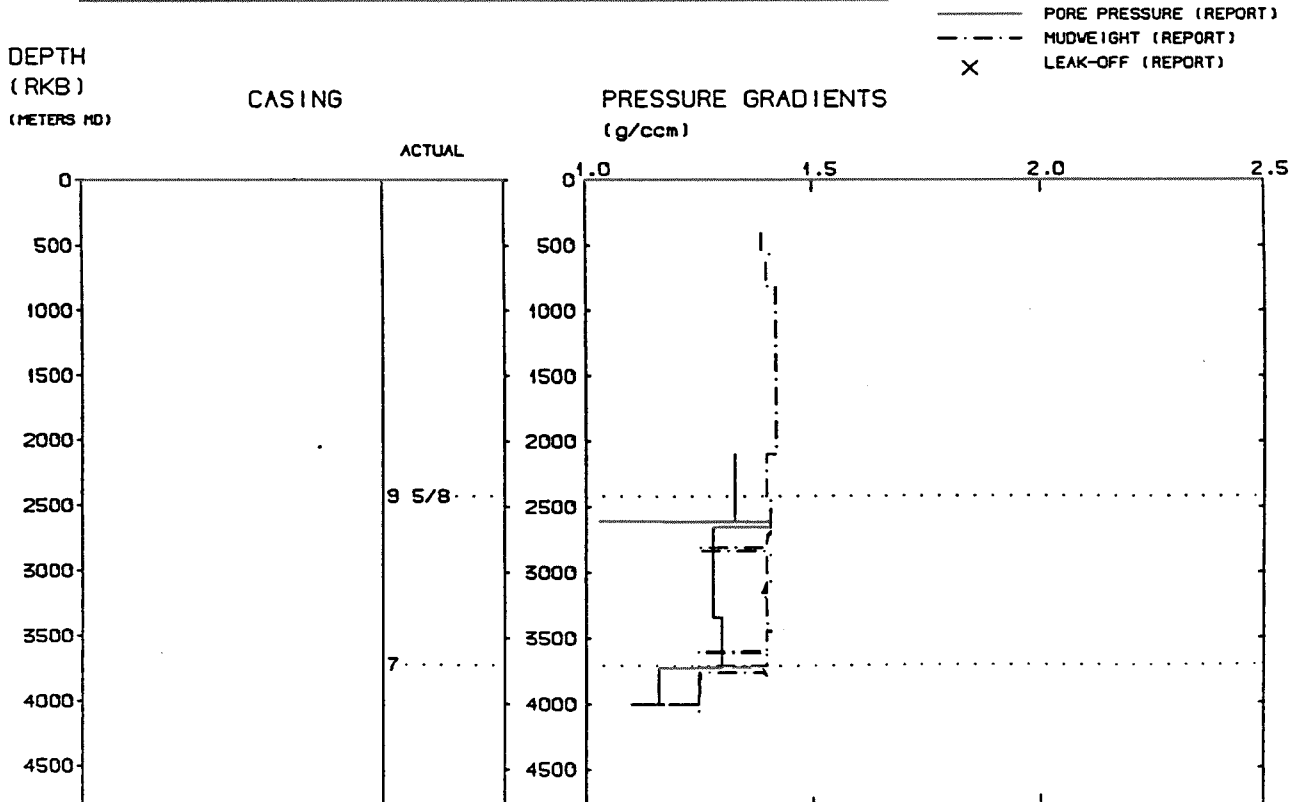
MAIN OPERATION : PLUG & ABANDON

Sub operations	Minutes	Hrs	% of total
CEMENT PLUG	2430	40.50	13.75
CIRC/COND	1580	26.33	8.94
EQUIP RECOVERY	3030	50.50	17.15
MECHANICAL PLUG	1230	20.50	6.96
OTHER	360	6.00	2.04
PERFORATE	390	6.50	2.21
SQUEEZE	750	12.50	4.24
TRIP	7900	131.67	44.71
Total	17670	294.50	100.00
Total time used		3120.00 hrs	

DEPTH V.S. TIME FOR WELL :



WELL: 712001 01 R2 PRESSURE COMPOSITE PLOT



Well History 7120/1-1, 7120-1-1 R, 7120-1-1 R2

GENERAL:

Well 7120/1-1 was drilled in the Alpha structure in the north of block 7120/1. The main objective of the well was to test Palaeozoic carbonates and clastics in a partly fault-bounded/truncated dip closure on the western flank of the Loppa High. Potential Early Triassic sandstones in a low relief dip closure were a secondary objective.

OPERATIONS:

Wildcat well 7120/1-1 was spudded 16 August 1985 by Dolphin Services A/S semi-submersible rig Borgny Dolphin and temporary plugged due to NPD regulations of drilling during the winter season. 7120/1-1 was suspended 24 November 1985 at a depth of 2594 m. Due to tight formation 17 1/2" pilot hole was drilled before 26" casing was set. 9 5/8" casing was set earlier than prognosed due to loss of mud to the formation. Shell requested permission for further drilling, and this was granted for drilling until 21 December 1985. The well was re-opened 2 December 1985, and after some problems getting started, a sidetrack was made at 2470 m. 7120/1-1 R was suspended 24 December 1985 at a depth of 2610 m. 7120/1-1 R2 was spudded 18 March 1986 at 2610 m and completed 21 July 1986 at a depth of 4003 m in Permian rocks. There were some problems while drilling with loss of mud to the formation due to cracks in the limestone.

2 cores were cut in the well, one in the interval 3185 - 3194 m which consisted of dark limestone with echinoids. The second core was cut at T.D. and consisted of metamorphic basement rocks.

The well was plugged and abandoned as a dry hole.

TESTING:

There were performed 2 DST tests in this well. Both were performed in a tight limestone with weak shows.

GEOLOGICAL TOPS

WELL: 7120/1-1,7120/1-1 R,7120/1-1 R2

Depth m (RKB)

<i>Nordland Group</i>	367.0
<i>Sotbakken Group</i>	490.0
<i>Torsk Fm.</i>	490.0
<i>Realgrunnen Group</i>	692.0
<i>Fruholmen Fm.</i>	692.0
<i>Krabbe Member</i>	692.0
<i>Reke Member</i>	737.0
<i>Akkar Member</i>	1260.0
<i>Ingøydjupet Group</i>	1315.0
<i>Snadde Fm.</i>	1315.0
<i>Kobbe Fm.</i>	2285.0
<i>Klappmyss Fm.</i>	2315.0
<i>Havert Fm.</i>	2373.0
<i>Tempelfjorden Group</i>	2403.0
<i>Miseryfjellet Fm.</i>	2403.0
<i>Gipsdalen Group</i>	3277.0
<i>Gipshuken Fm.</i>	3277.0
<i>Hambergfjellet Fm.</i>	3683.0
<i>T.D.</i>	4003.0