

Well no :	7120/10-2	Operator :	ESSO
Coordinates :	71° 05' 34.80" N 20° 14' 28.31" E	UTM coord.	788815358 N 47255690 E
Licence no :	98	Permit no :	643
Rig :	BYFORD DOLPHIN	Rig type :	SEMI-SUB.
Contractor :	DOLPHIN A/S	Elev. KB :	25 M
Bottom hole temp:	63°C	Water depth	186 M
Spud. date :	90.07.20	Total depth :	2500 M
Compl. date :	90.09.05	Form. at TD	JURASSIC
Spud. class :	WILDCAT	Prod.form. :	
Compl. class :	P&A. DRY HOLE		
Seisloca :	E 841 - 09 SP. 295		

LICENSEES

50.000000	DEN NORSKE STATS OLJESELSKAP A.S
50.000000	ESSO EXPL. & PROD. NORWAY 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
CONDUCTOR	30	248.0	36	250.0	.
INTERM.	13 3/8	523.0	17 1/2	533.0	1.86
INTERM.	9 5/8	1311.0	12 1/4	1321.0	1.85
OPEN HOLE			8 1/2	2500.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery M	%
1	2127.0 - 2135,6	8.6	100

MUD

Depth	Mud weight	Visc.	Mud type
224.000	1.03	1.0	WATER BASED
249.000	1.00		WATER BASED
536.000	1.07	7.0	WATER BASED
685.000	1.08	5.0	WATER BASED
1014.000	1.13	8.0	WATER BASED
1300.000	1.25	15.0	WATER BASED
1321.000	1.16	7.0	WATER BASED
1454.000	1.17	10.0	WATER BASED
1670.000	1.18	11.0	WATER BASED
1865.000	1.16	10.0	WATER BASED
1886.000	1.18	10.0	WATER BASED
2195.000	1.23	15.0	WATER BASED

Depth	Mud weight	Visc.	Mud type
2500.000	1.26	17.0	WATER BASED
2500.000	1.20	12.0	WATER BASED
2500.000	1.26	14.0	WATER BASED
2500.000	1.27	12.0	WATER BASED

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	540 - 2500	150

SHALLOW GAS

Interval below KB	Remarks
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AVAILABLE LOGS

Log type	Intervals	1/200	1/500	Div.
CBL VDL GR CCL	680.0 - 1311.0	X		
DIL LSS GR CALI SP	521.0 - 1313.0	X	X	
DIL LSS GR CALI SP	1312.0 - 1878.0	X	X	
DIL LSS GR CALI	1837.0 - 1935.0	X	X	
IRL CALI SP GR	2106.0 - 2493.0	X	X	
LDL CNL GR CALI	1312.0 - 1878.0	X	X	
LDL CNL GR CALI	1837.0 - 1935.0	X	X	
FDC CNL GR CALI	2106.0 - 2493.0	X	X	
MWD	245.0 - 2498.0		X	
DRILLING PRESS.DATA	212.0 - 2500.0			1:2500
MUD	212.0 - 2500.0		X	
VELOCITY	375.0 - 2500.0			
SYNTHETIC SEISMOGRAM	.10 cm/s			4

Main operations for well: 7120/10-2**Main operation: DRILLING**

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	3120	52,0	7,90
BOP/WELLHEAD EQ	5400	90,0	13,67
CASING	9300	155,0	23,54
CIRC/COND	450	7,5	1,14
DRILL	14505	241,8	36,71
OTHER	345	5,8	0,87
REAM	915	15,3	2,32
SURVEY	270	4,5	0,68
TRIP	5055	84,3	12,79
WAIT	150	2,5	0,38
Total	39510	658,5	100,00

Main operation: FORMATION EVAL

Sub operation:	Minutes:	Hours:	% of total:
CIRC/COND	3750	62,5	31,17
CORE	120	2,0	1,00
LOG	5610	93,5	46,63
TRIP	2550	42,5	21,20
Total	12030	200,5	100,00

Main operation: INTERRUPTION

Sub operation:	Minutes:	Hours:	% of total:
MAINTAIN/REP	7260	121,0	100,00
Total	7260	121,0	100,00

Main operation: MOVING

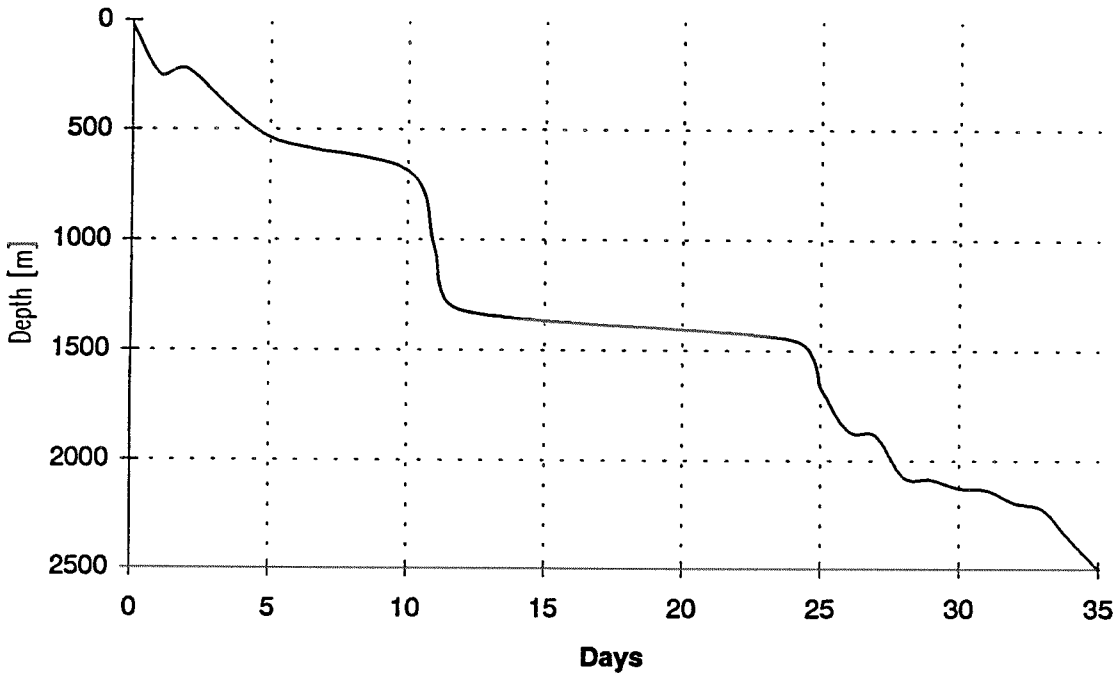
Sub operation:	Minutes:	Hours:	% of total:
ANCHOR	1380	23,0	14,60
TRANSIT	8070	134,5	85,40
Total	9450	157,5	100,00

Main operation: PLUG & ABANDON

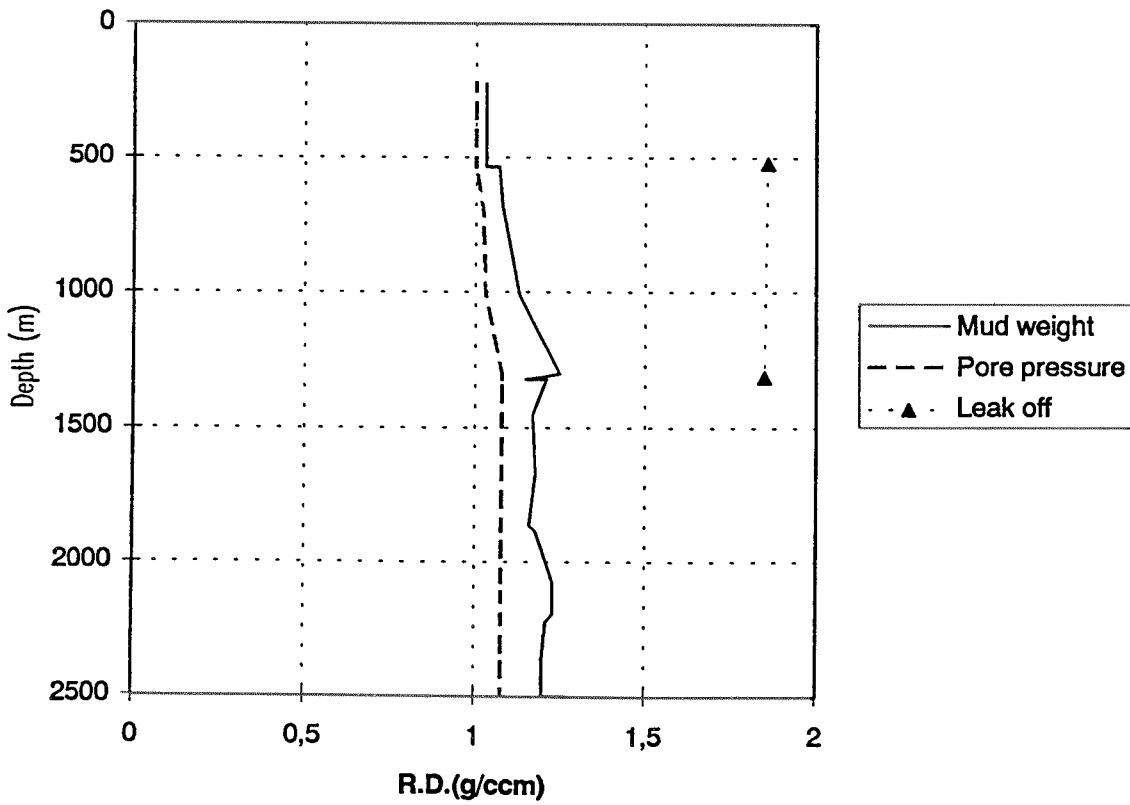
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	1695	28,3	22,16
CIRC/COND	210	3,5	2,75
CUT	270	4,5	3,53
EQUIP RECOVERY	2850	47,5	37,25
MECHANICAL PLUG	195	3,3	2,55
TRIP	2430	40,5	31,76
Total	7650	127,5	100,00

Total time used: Hours

Depth vs time for well: 7120/10-2



Composite plot for well: 7120/10-2



Well History 7120/10-2.

General:

Well 7120/10-2 was designed to drill Valanginian submarine fan sandstones, where the hydrocarbon trap is formed by updip sand pinchout to the south and west combined with structural dip to the northeast. The primary risks were the reservoir and the top/lateral seals, and volume of hydrocarbons generated from the drainage area. The reservoir was prognosed to be penetrated at 2080 m subsea. Block 7120/10 is situated at the southwest margin of the Hammerfest Basin with the Tromsø Basin to the west, and the Troms-Finnmark Platform to the south. The Troms-Finnmark Fault Zone which separates the platform area from the Hammerfest Basin was active during Late Jurassic/Early Cretaceous time, and had major influence on the sedimentation in Block 7120/10 at that time. Pleistocene to at 186-214 m subsea, might contain boulders and thus cause drilling problems. The source kitchen for the prospect was expected to be the Hekkingen formation of Late Jura, which is good to rich source rocks and contains oilprone kerogen.

Operations:

Wildcat well 7120/10-2 was spudded by the semi-submersible rig Byford Dolphin 20 July 1990, and completed 5 September 1990 at a depth of 2500 m RKB in rocks of Late Jurassic age. Significant operational problems occurred at three different occasions, that delayed drilling. After having made a trip to change the BHA one was unable to re-enter the hole and had to re-spud the well. Wellhead connector leak; rust and scale probably caused the retainer pins from engaging and securing the ring gasket. Logs hung up at ledges formed by hole washouts of shale/ claystone and resistant limestone remained in the hole. One core was cut in the well from 2127 to 2136 m RKB with 96% recovery. The core was cut close to the top of the sand-prone section. The well penetrated the reservoir at 2125 m RKB, and the reservoir sands all proved water bearing. The well penetrated the Hekkingen source rocks without encountering any "hot shales", although the formation contained organic rich material and showed significant gas increase. The well was permanently plugged and abandoned as a dry hole.

Testing:

No DST tests were performed in this well.

Geological Tops.

Well: 7120/10-2

	Depth m (RKB).
Nordland Group	211,0
Sotbakken Group	467,5
Torsken Fm	467,5
Nygrunnen Group	647,0
Kviting Fm	647,0
Nordvestbanken Group	704,0
Kolmule Fm	704,0
Kolje Fm	1443,0
Knurr eqv.Fm	1922,0
Teistengrunnen Group	2303,0
Hekkingen Fm	2303,0
T.D.	2500,0