Well no :	6306/10-1	Operator :	SHELL

Coordinates :	63° 09' 26.32" N 06° 19' 41.45" E	UTM coord. :	700608805 N 36541635 E
Licence no :	155	Permit no :	649
Rig :	DYVI STENA	Rig type :	SEMI-SUB.
Contractor :	STENA DRILLING A/S		
Bottom hole temp:	112 °C	Elev. KB :	25 M
Spud. date :	90.09.07	Water depth :	83 M
Compl. date :	90.12.17	Total depth :	3187 M
Spud. class :	WILDCAT	Form. at TD	BASEMENT
Compl. class :	P&A. OIL/GAS SHOWS	Prod.form. :	
Seisloca :	NMI-822, SP. 380		

LICENSEES

10,000000	ELF PETROLEUM NORGE A/S.
30,000000	NORSK HYDRO PRODUKSJON A.S
50,000000	DEN NORSKE STATS OLJESELSKAP A.S
10,000000	AMOCO 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
CONDUCTOR	30	169,0	36	171,0	
INTERM.	20	603,0	26	605,0	1,87
INTERM.	13 3/8	1499,0	17 1/2	1501,0	1,80
INTERM.	9 5/8	2644,0	12 1/4	2647,0	2,20
LINER	7	2995,0	8 1/2	3187,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters			Recovery M	%
1	1144,0	-	1170,0	26,0	100,0
2	1172,0	-	1200,0	28,0	100,0
3	2747,0	-	2759,0	12,0	100,0
4	2880,0	-	2888,0	8,00	100,0
5	3156,0	-	3159,6	3,60	100,0

MUD

Depth	Mud weight	Visc.	Mud type
121,000		100,0	WATER BASED
610,000	1,30	60,0	WATER BASED
1510,000	1,30	98,0	WATER BASED
1850,000	1,20	44,0	WATER BASED
2045,000	1,21	45,0	WATER BASED

Depth	Mud weight	Visc.	Mud type
2595,000	1,25	49,0	WATER BASED
2655,000	1,35	46,0	WATER BASED
2655,000	1,25	47,0	WATER BASED
2683,000	1,35	50,0	WATER BASED
2707,000	1,35	50,0	WATER BASED
2747,000	1,55	49,0	WATER BASED
2908,000	1,60	61,0	WATER BASED
2950,000	1,58	65,0	WATER BASED
3141,000	1,60	53,0	WATER BASED
3141,000	1,60	60,0	WATER BASED
3187,000	1,55	68,0	WATER BASED

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	620 - 3169	270
CUTTINGS	620 - 3169	270

SHALLOW GAS

Interval below KB	Remarks

AVAILABLE LOGS

Log type	Intervals		
ACBL VDL GR	603,0	-	1498,6
ACBL VDL GR	2480,0	-	2979,0
CBL AC VDL GR	1355,0	-	2643,0
CDL CN GR	1498,6	-	2631,0
CDL CNL SPECTRALOG	2642,0	-	3141,0
CNL CN GR	603,0	-	1495,0
CZDL CN SL GR	2995,0	-	3184,0
CZDL CNL GR	603,0	-	1495,0
DIFL BHC AC GR	603,0	-	3184,0
DLL MLL GR	603,0	-	3184,0
DRILLING DATA PLOT	610,0	-	3186,0
FMT	1138,0	-	3115,0
VELOCITY	614,0	-	3175,0
MUD	610,0	-	3186,0

Log type	Intervals		
MWD	100,000	-	3074,000
PRESSURE EVALUATION	100,000	-	3186,000
SYNTHETIC SEISMOGRAM			
TEMPERATURE DATA	610,000	-	3186,000
VSP			
ZDL CN GR	2642,000	-	3141,000

Main operations for well: 6306/10–1

Main operation: DRILLING

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	4465	74,4	5,63
BOP/WELLHEAD EQ	2360	39,3	2,98
CASING	16740	279,0	21,11
CIRC/COND	1545	25,8	1,95
DRILL	30998	516,6	39,09
HOLE OPEN	2640	44,0	3,33
OTHER	45	0,8	0,06
PRESS DETECTION	15	0,3	0,02
REAM	1275	21,3	1,61
SURVEY	1450	24,2	1,83
TRIP	17760	296,0	22,40
Total	79293	1321,6	100,00

Main operation: FORMATION EVAL

Sub operation:	Minutes:	Hours:	% of total:
CIRC SAMPLES	327	5,5	0,90
CIRC/COND	1065	17,8	2,94
CORE	4245	70,8	11,73
LOG	13080	218,0	36,16
OTHER	570	9,5	1,58
PROD TEST	9915	165,3	27,41
TRIP	6975	116,3	19,28
Total	36177	603,0	100,00

Main operation: INTERRUPTION

Sub operation:	Minutes:	Hours:	% of total:
FISH	2790	46,5	14,04
LOST CIRC	315	5,3	1,58
MAINTAIN/REP	4375	72,9	22,01
OTHER	4985	83,1	25,08
WAIT	7410	123,5	37,28
Total	19875	331,3	100,00

Main operation: MOVING

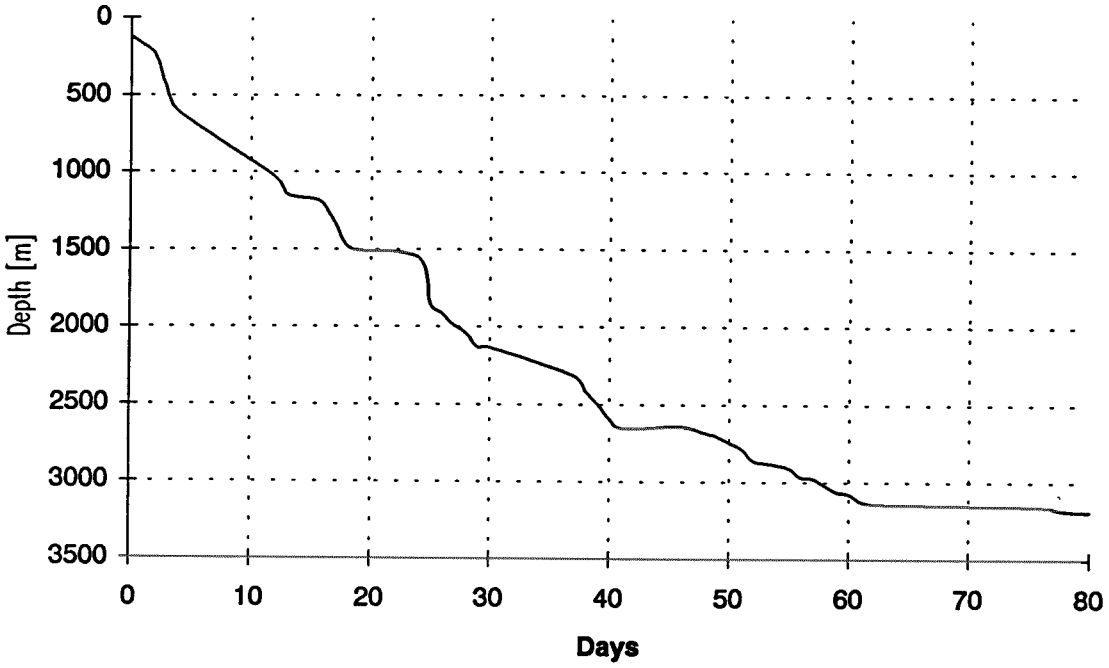
Sub operation:	Minutes:	Hours:	% of total:
ANCHOR	4230	70,5	44,34
POSITION	45	0,8	0,47
TRANSIT	5265	87,8	55,19
Total	9540	159,0	100,00

Main operation: PLUG & ABANDON

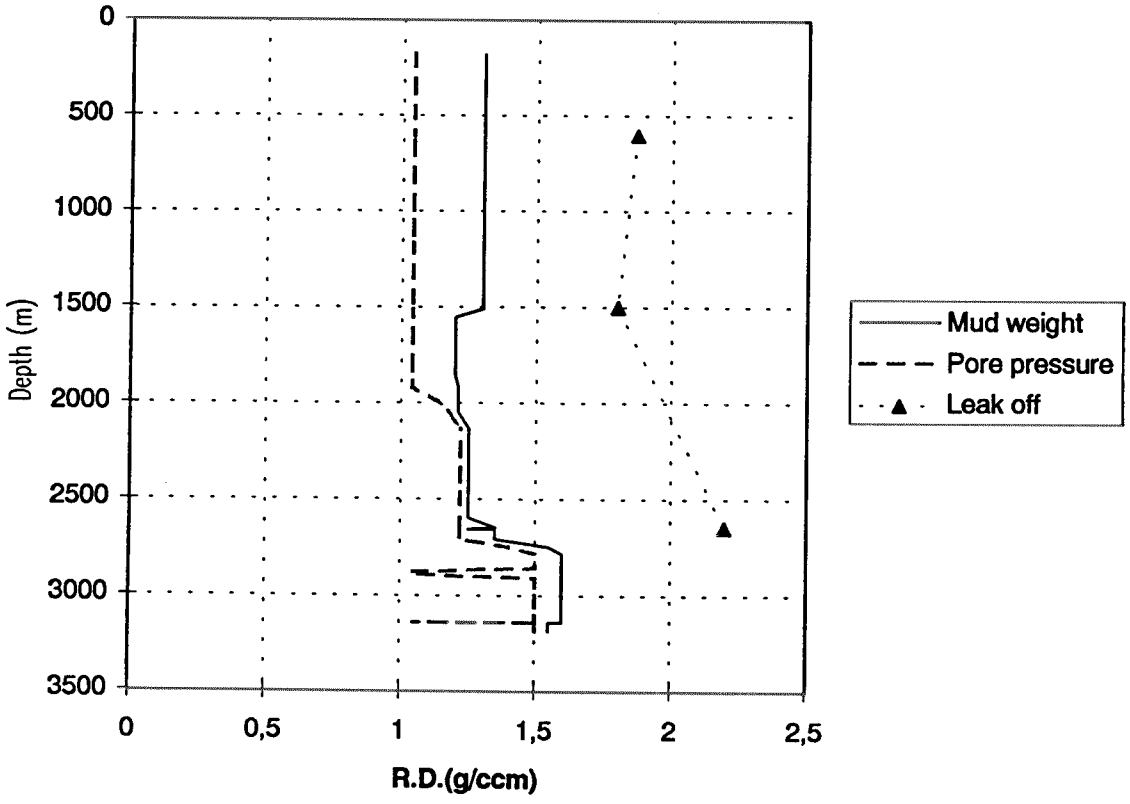
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	930	15,5	8,74
CIRC/COND	690	11,5	6,49
CUT	900	15,0	8,46
EQUIP RECOVERY	2370	39,5	22,28
SQUEEZE	90	1,5	0,85
TRIP	5655	94,3	53,17
Total	10635	177,3	100,00

Total time used: 2592,0 Hours

Depth vs time for well: 6306/10-1



Composite plot for well: 6306/10-1



Well History 6306/10-1.

General:

Well 6306/10-1 was designed to drill the Skalmen prospect which is a structural closure located at the northern apex of the Gossa High in block 6306/10. Amplityde anomalies was seen at 280-, 300-, 400-, 1200 to 1300-, and 2200- 2400 ms. The main objectives of the well were:

to test the hydrocarbon potential of the Early Jurassic and Pre-Jurassic sequences, which is believed to be developed in a sandy facies of deltaic/fluvial origin.

to test potential reservoir developments in the Cretaceous interval and Late Jurassic within dipclosure.

to test the hydrocarbon potential of Paleocene sands.

It was proposed to drill some 250-300 m into rocks of Pre-jurassic age. The well would penetrate the principal objective, the Early Jurassic sequence, some 316 m downdip from the structural culmination. The location allowed penetration of a maximum thickness of the Early Jurassic Åre- and Tilje formations, while leaving only an insignificant trap capacity updip. Cretaceous and younger formations, which provide secondary and tertiary objevtives, would be penetrated close to their structural culmination.

Operations:

Wildcat well 6306/10-1 was spudded 7 September 1990 by the semi-submersible rig Dyvi Stena, and was completed 17 Desember 1990 at a depth of 3187 m RKB in basement rocks. Shallow gas was not observed. Overcompacted sediments and boulders caused some problems, and the well had to be re-spudded several times. Indications of hydrocarbons were encountered in Middle Jurassic rocks and from side wall samples taken in the metamorphic basement section. A total of 5 conventional cores were cut in the well. Rapid deterioration of weather caused some delay in the drilling procedure as the string was temporary hung off several times. Production testing of both basement and the Jurassic interval produced only small volumes of gas at very low rates. The well was permanently plugged and abandoned as a dry hole with shows.

Testing:

Two DST tests were carried out in this well:
No 1 perforated from 2995 -to 3187 m RKB in basement.
No 2 perforated from 2716 -to 2827 m RKB in Jurassic rocks.

Geological Tops.

Well:6306/10-1.

	Depth m (RKB).
Nordland Group	108,0
Hordaland Group	275,0
Rogaland Group	610,0
Tang Fm	610,0
Skalmen Fm	1138,0
Shetland Group	1285,0
Springar Fm	1285,0
Nise Fm	1544,5
Kvitnos Fm	1734,0,
Senonian Sst unit	1825,0
Kvitnos Fm	1858,
Cromer Knoll Group	1992,0
Lysing Fm	1992,0
Lange Fm	1999,0
Viking Group	2691,5
Melke Fm Eqv	2691,5
Fangst Group	2781,0
Garn Fm Eqv	2781,0
Paleosol	2980,0
Basement	2989,0
T.D.	3187,0