

Well no : 6201/11-01

Operator : STATOIL

Coordinates : 62 01 52.73 N  
01 30 50.37 EUTM coord. : 6878724 N  
422247 E

Licence no : 130

Permit no : 556

Rig : DEEPSEA BERGEN

Rig type : SEMI-SUB.

Contractor : ODFJELL DRILLING AND CONSULTING COMPANY A/S

Bottom hole temperature : deg.C

Elev. KB : 23 M

Spud. date : 87.08.13

Water depth : 381 M

Compl. date : 87.11.06

Total depth : 3850 M

Spud. class : WILDCAT

Form. at TD : TRIASSIC

Compl. class : P&amp;A. OIL DISCOVERY

Prod. form : L.TRIASSIC

Seisloca : MS 85 - 407 SP. 812

## LICENSEES

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 15.000000 PETROBRAS NORGE A/S  
 15.000000 A/S NORSKE SHELL  
 50.000000 DEN NORSKE STATS OLJESELSKAP A.S  
 20.000000 TEXAS EASTERN NORWEGIAN INC.

## CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3
CONDUCTOR	30	479.0	36	481.0	.
SURF.COND.	20	641.0	26	930.0	1.35
INTERM.	13 3/8	1735.0	17 1/2	1808.0	1.60
INTERM.	9 5/8	2599.0	12 1/4	2620.0	1.84
LINER	7	3383.0	8 1/2	3384.0	2.30

## CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	2701.0 - 2712.3	11.3	100.0	
2	2729.0 - 2739.3	10.3	93.6	UPPER TRIASSIC
3	2740.0 - 2765.5	25.5	100.0	UPPER TRIASSIC
4	2767.5 - 2777.5	10.0	100.0	UPPER TRIASSIC
5	2779.5 - 2785.5	5.1	100.0	? UPPER TRIASSIC
6	2822.0 - 2835.0	13.0	100.0	UPPER TRIASSIC
7	2836.0 - 2846.0	10.0	100.0	UPPER TRIASSIC
8	2853.5 - 2881.5	27.7	98.9	UPPER TRIASSIC
9	2881.5 - 2918.6	37.0	100.0	UPPER TRIASSIC

## MUD PROPERTIES

Depth below KB meter	Mud weight g/cm3	Viscosity	Mud type
327.000	1.06	0.0	WATER BASED
650.000	1.30	6200.0	WATER BASED

650.000	1.05	100.0	WATER BASED
780.000	1.15	6100.0	WATER BASED
930.000	1.30	7000.0	WATER BASED
1426.000	1.20	6900.0	WATER BASED
1698.000	1.24	7500.0	WATER BASED
1750.000	1.35	7000.0	WATER BASED
1753.000	1.45	6600.0	WATER BASED
1808.000	1.35	2300.3	WATER BASED
1808.000	1.48	6400.0	WATER BASED
1808.000	1.51	4900.0	WATER BASED
2166.000	1.45	3000.0	WATER BASED
2439.000	1.48	2800.0	WATER BASED
2620.000	1.51	5000.0	WATER BASED
3384.000	1.70	4900.0	WATER BASED
3448.000	1.51	23.0	WATER BASED

## DRILL STEM TEST

### INTERVALS AND PRESSURES

Test no.	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	2818.000 - 2852.000 Test temperature: 104 °C		14.6	4230.3	
2.0	2746.500 - 2771.000 Test temperature: 103 °C	6.4	17.7	3952.0	
3.0	2712.600 - 2716.700 Test temperature: 105 °C	10.3	392.5	1469.0	

### RECOVERY

Test no.	Oil Sm <sup>3</sup> /d	Gas Sm <sup>3</sup> /d	Oil grav. g/cm <sup>3</sup>	Gas grav. rel. air	GOR m <sup>3</sup> /m <sup>3</sup>
1.0	0	0	0.000	0.000	0
2.0	0	0	0.000	0.000	0
3.0	91	72600	0.835	0.630	798

## DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	680-3850	500
Wet Samples	680-3850	330

## SHALLOW GAS

Interval below KB	REMARKS
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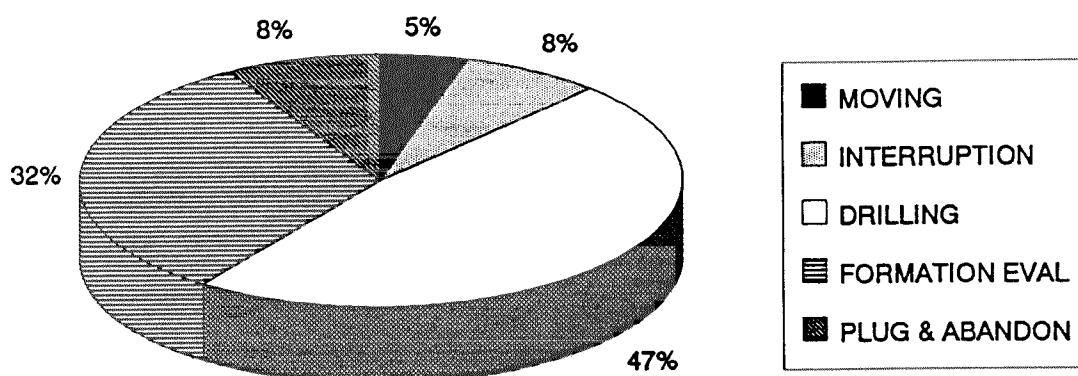
## AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500	Div.
MWD	490.000 - 3375.000	X	X	

DIL BHC GR	404.000 - 929.000	X	X
DIL BHC GR	799.000 - 1748.000	X	X
DIL BHC GR	1735.000 - 2618.000	X	X
DIL BHC GR	2600.000 - 3382.000	X	X
DIL LSS MSFL GR	3383.000 - 3847.000	X	X
DLL MSFL GR	2600.000 - 3379.000	X	X
LDL CNL GR	404.000 - 929.000	X	X
LDL CNL GR	799.000 - 1748.000	X	X
LDL CNL GR	1735.000 - 2618.000	X	X
LDL CNL SGR	2095.000 - 3385.000	X	X
LDL CNL SGR	2600.000 - 3072.000	X	X
LDL CNL GR	3383.000 - 3849.000	X	X
SHDT GR	2600.000 - 3383.000	X	
SHDT GR	3383.000 - 3849.000	X	
CDM AP/SHDT	2605.000 - 3384.000	X	X
CDM AP/SHDT MSD	3385.000 - 3849.000	X	X
RFT HP GAUGE	2681.000 - 2726.000		
RFT HP GAUGE	2715.000 - 2805.000		
RFT HP GAUGE	2682.000 - 3229.000		
RFT STRAIN GAUGE	2681.000 - 2726.000		
RFT STRAIN GAUGE	2715.000 - 2805.000		
RFT STRAIN GAUGE	2682.000 - 3229.000		
NGS PLAYBACK	2095.000 - 3385.000	X	
NGS RATIOS PLAYBACK	2600.000 - 3064.000	X	
CBL VDL	613.000 - 1651.000	X	
CBL VDL GR	1535.000 - 2596.000	X	
CBL VDL GR	1700.000 - 3383.000	X	
DRILLING DATA PRESS.	404.000 - 3850.000		1:5000
MUD	404.000 - 3850.000		X
VELOCITY	1735.000 - 3847.000		1:1000X
(Airgun velocity survey & calibrated log data			1 stk.)
(Display of well velocity survey records			3 stk.)
(VSP, 10 cm/s			5 stk.)
(Two-way travel time, 10cm/s			1 stk.)
(Synthetic seismogram, marine, 10 cm/s			5 stk.)

# DAILY DRILLING REPORT SYSTEM

MAIN OPERATIONS FOR WELL: 6201/11-01



Main operation	Minutes	Hrs	% of total
MOVING	6300	105,0	4,86
INTERRUPTION	9780	163,0	7,55
DRILLING	61830	1030,5	47,71
FORMATION EVAL	41040	684,0	31,67
PLUG & ABANDON	10650	177,5	8,22
<i>Total</i>	129600	2160,0	100,00

## SUB OPERATION FOR WELLS: 6201/11-01

### MAIN OPERATION: MOVING

Sub operation	Minutes	Hrs	% of total
TRANSIT	3720	62,0	59,05
ANCHOR	1890	31,5	30,00
POSITION	690	11,5	10,95
<i>Total</i>	6300	105,0	100,00

### MAIN OPERATION: INTERRUPTION

Sub operation	Minutes	Hrs	% of total
MAINTAIN/REP	1710	28,5	17,48
WELL CONTROL	1230	20,5	12,58
WAIT	2400	40,0	24,54
FISH	4440	74,0	45,40
<i>Total</i>	9780	163,0	100,00

### MAIN OPERATION: DRILLING

Sub operation	Minutes	Hrs	% of total
OTHER	960	16,0	1,55
CASING	11311	188,5	18,29
DRILL	22860	381,0	36,97
SURVEY	990	16,5	1,60
CIRC/COND	4620	77,0	7,47
TRIP	13080	218,0	21,15
HOLE OPEN	780	13,0	1,26
BOP/WELLHEAD EQ	3420	57,0	5,53
BOP ACTIVITIES	1769	29,5	2,86
PRESS DETECTION	1980	33,0	3,20
REAM	60	1,0	0,10
<i>Total</i>	61830	1030,5	100,00

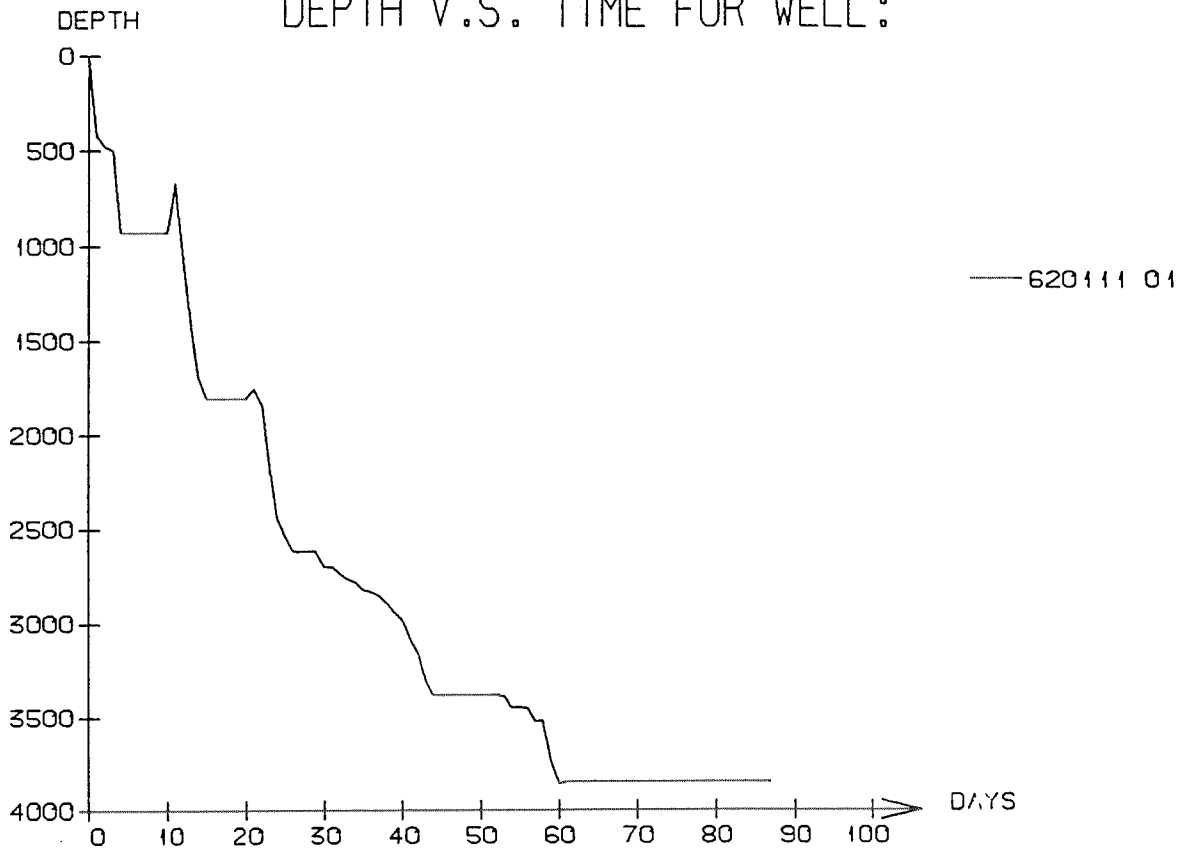
### MAIN OPERATION: FORMATION EVAL

Sub operation	Minutes	Hrs	% of total
LOG	9270	154,5	22,59
CIRC SAMPLES	1410	23,5	3,44
TRIP	5190	86,5	12,65
CIRC/COND	600	10,0	1,46
WAIT	30	0,5	0,07
CORE	3660	61,0	8,92
RFT/FIT	390	6,5	0,95
OTHER	60	1,0	0,15
DST	20430	340,5	49,78
<i>Total</i>	41040	684,0	100,00

### MAIN OPERATION: PLUG & ABANDON

Sub operation	Minutes	Hrs	% of total
CEMENT PLUG	1350	22,5	12,68
WAIT	510	8,5	4,79
TRIP	3930	65,5	36,90
CIRC/COND	780	13,0	7,32
MECHANICAL PLUG	600	10,0	5,63
PERFORATE	720	12,0	6,76
SQUEEZE	720	12,0	6,76
CUT	720	12,0	6,76
EQUIP RECOVERY	1320	22,0	12,39
<i>Total</i>	10650	177,5	100,00

# DEPTH V.S. TIME FOR WELL :



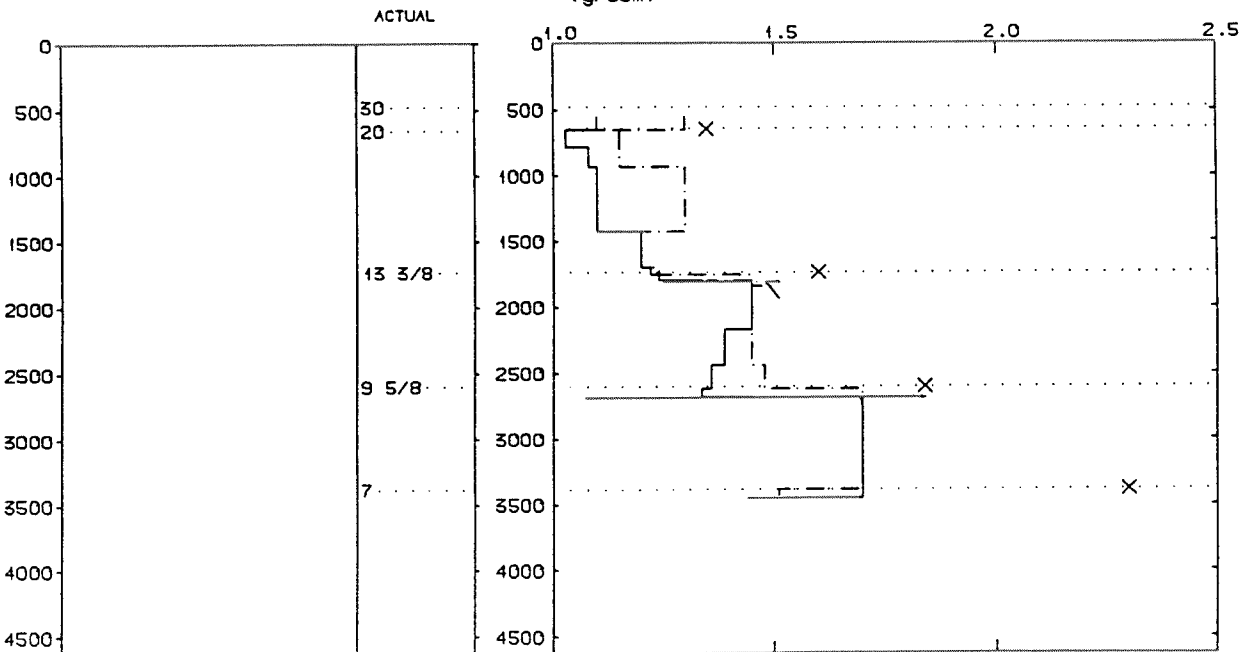
## WELL: 620111 01 PRESSURE COMPOSITE PLOT

DEPTH  
(RKB)  
(METERS MD)

CASING

PRESSURE GRADIENTS  
(g/ccm)

— PORE PRESSURE (REPORT)  
- - - MUDWEIGHT (REPORT)  
X LEAK-OFF (REPORT)



# Well History 6201/11-1

## GENERAL:

Well 6201/11-1 was drilled on the Albert structure as the first well on the Norwegian side of the Nordfjord Horst. The best well for correlation is expected to be UK well 211/2-1 which was terminated in rocks of possibly Rhaetic age and was dry.

The primary objective for the well was to test the hydrocarbon potential in sandstones of Triassic age in the A prospect. A secondary objective was to test the structural closure in the Lista/Sele Formation and to acquire geological information related to remaining prospects in the block.

## OPERATIONS:

Wildcat well 6201/11-1 was spudded 13 August 1987 by Odfjell Drilling & Consts. Co. semi-submersible rig Deepsea Bergen and completed 6 November 1987 at a depth of 3850 m in Triassic rocks. At 3384 m there was a problem with hole stability and drilling was stopped. It was decided to set 7" liner.

9 cores were cut in the well. 5 cores were cut in the interval 2701 - 2785 m, and 4 cores between 2822 - 2917.5 m. Top reservoir came in as prognosed. There were good oil shows down to 2881 m, and the logs show possible oil saturation down to the same depth. It is difficult to evaluate the logs due to a cemented reservoir. The porosity and permeability are low, and it has hard to take RFT-measurements.

The well is plugged and abandoned as an oil discovery.

## TESTING:

3 DST tests were performed in the well. DST 1 was performed in the intervals 2818 - 2832 m and 2839 - 2852 m, DST 2 between 2746.5 - 2771 m and DST 3 between 2713 - 2717 m. Due to the fact that the reservoir is tightly cemented, the shown resources in this hole are relatively small.

# GEOLOGICAL TOPS

WELL: 6201/11-1

	Depth m (RKB)
<i>Nordland Group</i>	404.0
<i>Utsira Fm.</i>	1261.0
<i>Hordaland Group</i>	1292.0
<i>Rogaland Group</i>	1776.0
<i>Balder Fm.</i>	1776.0
<i>Sele Fm.</i>	1832.0
<i>Lista Fm.</i>	1955.0
<i>Shetland Group</i>	2031.0
<i>Jorsalfare Fm.</i>	2031.0
<i>Kyrre Fm.</i>	2497.0
<i>Svarte Fm.</i>	2602.0
<i>Hegre Group</i>	2678.0
<i>Lunde Fm.</i>	2678.0
<i>Lomvi Fm.</i>	2532.0
<i>T.D.</i>	3850.0