

Well no : 34/ 7-01

Operator : SAGA

Coordinates	: 61 28 21.92 N 02 13 24.71 E	UTM coord.	: 6815855 N
		UTM zone 31	: 458628 E
Licence no	: 089	Permit no	: 415
Rig	: VILDKAT	Rig type	: SEMI-SUB.
Contractor	: DITLEV-SIMONSEN (SDS DRILLING)		
Bottom hole temperature	: 84 deg.C	Elev. KB	: 24 M
Spud date	: 84.05.09	Water depth	: 328 M
Compl. date	: 84.07.24	Total depth	: 2905 M
Spud class.	: WILDCAT	Age at TD	: TRIASSIC
Compl. class.	: P&A. OIL DISCOVERY		
Seis. loc.	: 8231 - 125 SP. 200		

## LICENSEES

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4.000	DEMINEX (NORGE) A/S
1.000	DET NORSKE OLJESELSKAP A/S
8.000	ELF AQUITAINE NORGE A/S
15.000	ESSO NORGE A/S
12.000	NORSK HYDRO PRODUKSJON A.S
10.000	SAGA PETROLEUM A.S.
50.000	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 <sup>3</sup>
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CONDUCTOR	30	476.0	36	478.0	
SURF.COND.	20	1070.0	26	1106.0	1.57
INTERM.	13 3/8	1844.0	17 1/2	1870.0	1.92
INTERM.	9 5/8	2632.0	12 1/4	2905.0	

## CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	2397.0 - 2412.0	12.5	83.0	UPPER TRIASSIC
2	2412.0 - 2436.0	20.4	85.0	UPPER TRIASSIC
3	2436.0 - 2462.0	26.0	99.9	UPPER TRIASSIC
4	2463.0 - 2490.0	27.0	99.9	UPPER TRIASSIC
5	2491.0 - 2518.0	27.0	99.9	UPPER TRIASSIC
6	2518.0 - 2545.0	27.0	99.9	UPPER TRIASSIC
7	2545.0 - 2573.0	28.0	99.9	UPPER TRIASSIC
8	2573.0 - 2595.0	21.0	95.0	UPPER TRIASSIC
9	2595.0 - 2605.0	9.3	93.0	UPPER TRIASSIC
10	2605.0 - 2623.0	18.0	99.9	UPPER TRIASSIC

## MUD PROPERTIES

Depth below KB meter	Mud weigh g/cm <sup>3</sup>	Funnel viscosity s/qt	Mud type
420.0	1.03	100.0	WATER BASED
478.0	1.05	100.0	WATER BASED
700.0	1.07	50.0	WATER BASED
1037.0	1.14	45.0	WATER BASED
1106.0	1.16	52.0	WATER BASED
1422.0	1.20	56.0	WATER BASED
1450.0	1.23	50.0	WATER BASED
1763.0	1.37	50.0	WATER BASED
1870.0	1.46	53.0	WATER BASED
2067.0	1.51	57.0	WATER BASED
2194.0	1.56	54.0	WATER BASED
2394.0	1.64	55.0	WATER BASED
2397.0	1.58	54.0	WATER BASED
2412.0	1.63	55.0	WATER BASED
2562.0	1.64	30.0	WATER BASED
2606.0	1.66	46.0	WATER BASED
2623.0	1.64	30.0	WATER BASED
2629.0	1.70	30.0	WATER BASED
2650.0	1.65	46.0	WATER BASED
2760.0	1.73	55.0	WATER BASED
2905.0	1.76	62.0	WATER BASED

## DRILL STEM TEST

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### INTERVALS AND PRESSURES

Test no.	Interval meter	Choke size	Pressure (PSI)		
			FSIP	BTHP	WHP
1.0	2581.5 - 2574.0	11.0		5341.5	2705.0
2.0	2467.0 - 2455.0	9.5		5256.0	2429.0
3.0	2416.5 - 2409.7	17.5		4721.0	2109.0

### RECOVERY

Test no.	Oil Sm <sup>3</sup> /d	Gas M 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	868		0.833	0.925	84
2.0	509				80
3.0	1606		0.834	0.985	60

## DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTINGS	480 - 2903	360
WET SAMPLES	480 - 2903	400

## SHALLOW GAS

INTERVAL BELOW KB	REMARKS
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NONE

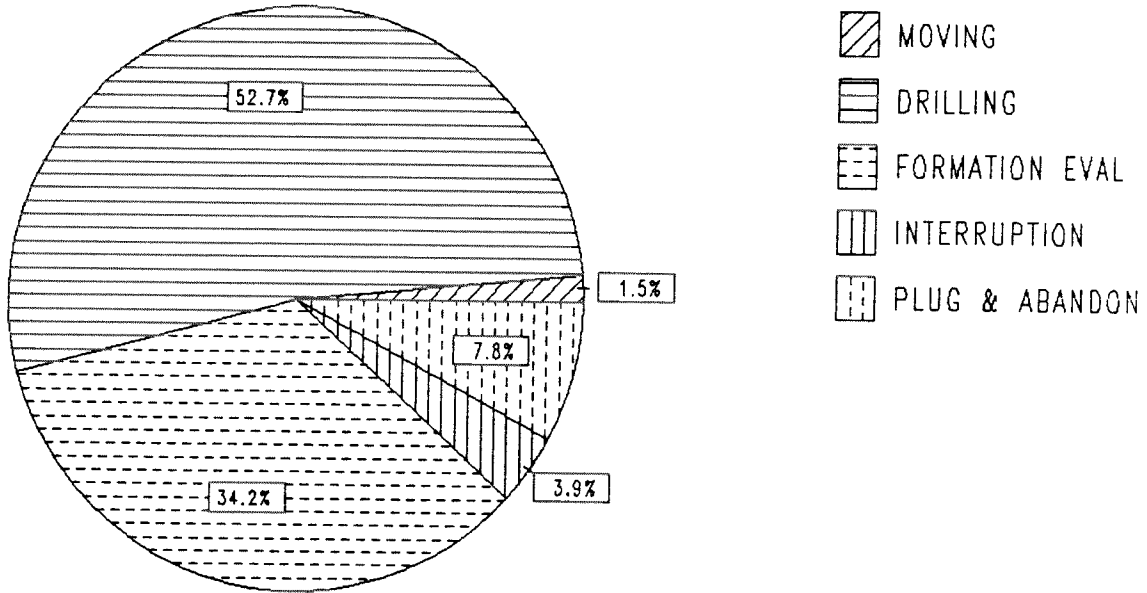
## AVAILABLE LOGS

LOG TYPE	INTERVAL	1/200	1/500
ISF DDBHC GR	477 - 1105	X	X
ISF DDBHC	1072 - 1852	X	X
ISF DDBHC	1841 - 2621	X	X
ISF MSFL BHC	2610 - 2904	X	X
LDL	1072 - 1854	X	X
LDL CNL	2370 - 2623	X	X
LDL CNL	1841 - 2905	X	X
DLL MSFL	2370 - 2619	X	X
CDM AP MSD	1839 - 2900	X	X
CDM PP MSD	2393 - 2622		
CDM PP MSD	2393 - 2905		
CDM PP CSB	2393 - 2622		
CDM PP CSB	2393 - 2905		
SHDT	1840 - 2905	X	
NGL SPECTRUM	1841 - 2905	X	X
BGL	1072 - 1848	X	X
RFT PRESSURE DATA	2394 - 2619	1:100	
RFT RECOMPUTATION	2580 - 2736		
MWD	473 - 2902		X
CBL VDL	1713 - 2602	X	
MUD	478 - 2905		X
VELOCITY	477 - 2904	1:1000	X

(+ Airgun Well Velocity Survey and Calibr. log data. 1 stk)  
 (+ Synthetic Seismogram, Marine, 10 cm/s. 1 stk)  
 (+ Synthetic Seismogram, 10 cm/s. 4 stk)  
 (+ VSP, static near field gun, 10 cm/s. 13 stk)  
 (+ VSP, static far field gun, 10 cm/s. 21 stk)  
 (+ VSP, vertical incident vsp, plot 1-11. 11 stk)  
 (+ VSP, single offset vsp - 2000 m east, plot 1-13. 13 stk)  
 (+ VSP, single offset vsp - 2000 m west, plot 1-9. 9 stk)

# DAILY DRILLING REPORT SYSTEM

Main operation : 34/07-01



Total : 1872.00 HRS

Main operation	Minutes	Hours	% of total
MOVING	1650	27.50	1.4
DRILLING	59160	986.00	52.6
FORMATION EVAL	38370	639.50	34.1
INTERRUPTION	4380	73.00	3.8
PLUG & ABANDON	8760	146.00	7.7

## MAIN OPERATION: MOVING

Sub operations	Min	% of total
ANCHOR	1650	100.00
TOTAL	1650	100.00

## MAIN OPERATION: DRILLING

Sub operations	Min	% of total
BOP/WELLHEAD EQ	2970	5.02
TRIP	14010	23.68
DRILL	20580	34.79
CIRC/COND	4110	6.95
CASING	7830	13.24
OTHER	5430	9.18
WAIT	540	0.91
SURVEY	120	0.20
UNDERREAM	1530	2.59
REAM	1050	1.77
BOP ACTIVITIES	990	1.67
TOTAL	59160	100.00

## MAIN OPERATION: FORMATION EVAL

Sub operations	Min	% of total
LOG	8100	21.11
CORE	360	0.94
TRIP	9690	25.25
OTHER	6870	17.90
DST	12690	33.07
CIRC/COND	660	1.72
TOTAL	38370	100.00

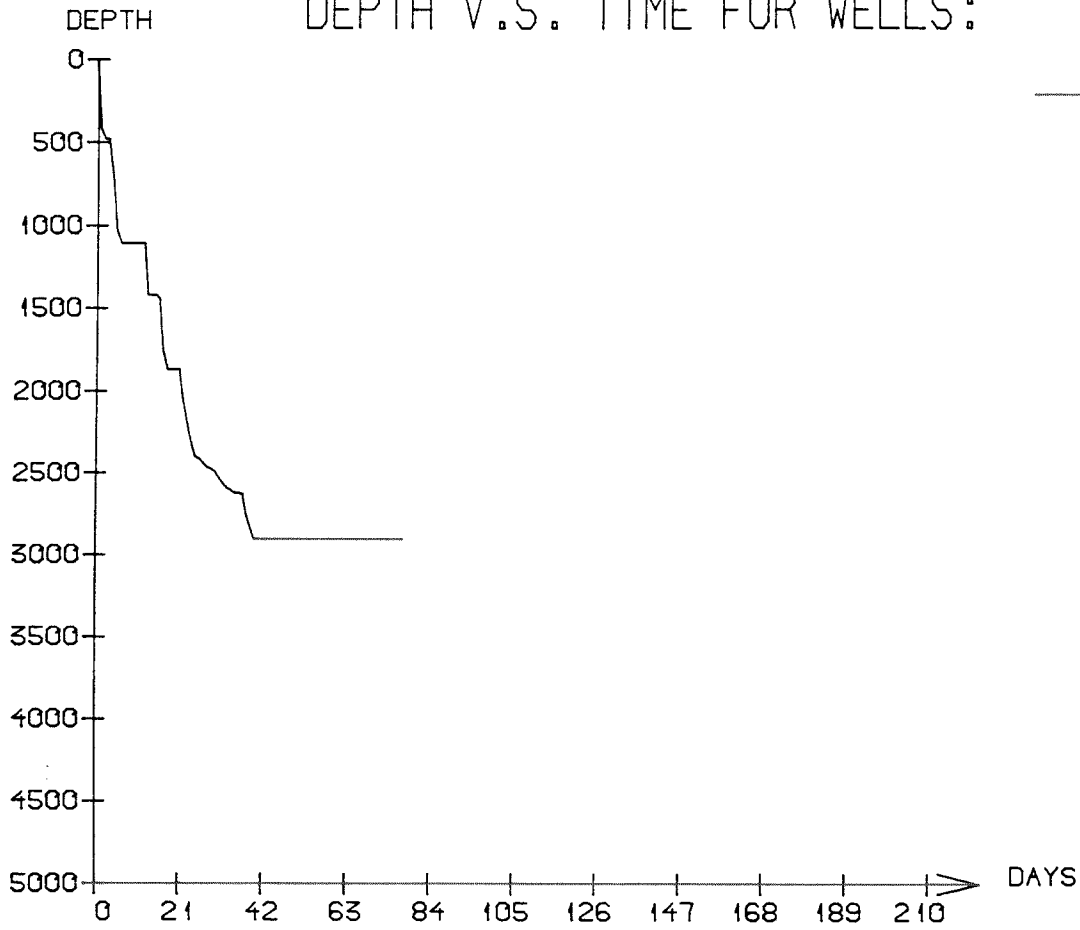
## MAIN OPERATION: INTERRUPTION

Sub operations	Min	% of total
OTHER	840	19.18
FISH	3180	72.60
WAIT	120	2.74
MAINTAIN/REP	240	5.48
TOTAL	4380	100.00

## MAIN OPERATION: PLUG &amp; ABANDON

Sub operations	Min	% of total
CIRC/COND	150	1.71
TRIP	2700	30.82
OTHER	4200	47.95
CUT	1080	12.33
PERFORATE	540	6.16
CEMENT PLUG	90	1.03
TOTAL	8760	100.00

# DEPTH V.S. TIME FOR WELLS:



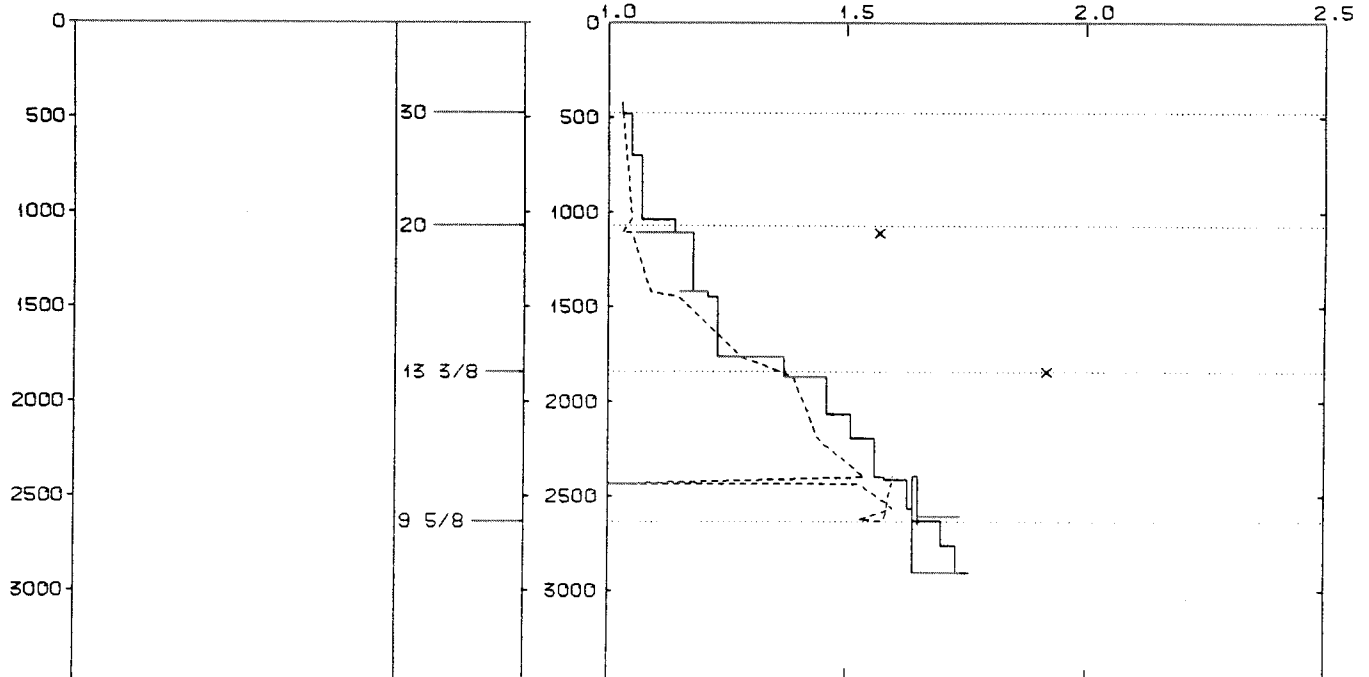
## WELL: 003407 01 PRESSURE COMPOSITE PLOT

DEPTH  
(RKB)  
(METERS)

CASING

PRESSURE GRADIENTS  
(g/ccm)

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



## WELL HISTORY - 34/7-1

### GENERAL:

The wildcat 34/7-1 was drilled on a structure northeast in block 34/7. The continuation of this structure was explored by well 34/4-4 (see WDSS vol.14). The main objective of 34/7-1 was Upper Triassic sandstones, which proved hydrocarbon bearing in 34/4-4. Hydrocarbons were encountered in the Upper Triassic Lunde Formation.

### OPERATIONS:

34/7-1 was spudded 09.05.84 by the semi-submersible rig Vildkat. Ten cores were cut in the Upper Triassic sequence. Tight spots occurred in the 26" hole section. In the 17 1/2" hole the string got stuck at 1274 m. The string had to be backed off and was fished out of the hole. Some tight spots occurred in this section too. When running the 9 5/8" casing, lost returns were experienced three times and the casing was pulled out of the hole. A velocity log was run, and the well was plugged back to 2640 m by setting two cement plugs and the 9 5/8" casing was landed at 2632 m. The well was drilled using water based mud.

### TESTING:

Three drill stem tests were performed in the oil bearing section of the Lunde Formation. All three tests produced oil.



# GEOLOGICAL TOPS

WELL: 34/ 7-01

	<i>Depth m (RKB)</i>
<i>Nordland Group</i>	<i>353.000</i>
<i>Utsira Fm</i>	<i>1052.000</i>
<i>Hordaland Group</i>	<i>1166.000</i>
<i>Rogaland Group</i>	<i>1673.000</i>
<i>Balder Fm</i>	<i>1673.000</i>
<i>Lista/Sele Fm</i>	<i>1696.000</i>
<i>Shetland Group</i>	<i>1823.000</i>
<i>Cromer Knoll Group</i>	<i>2387.000</i>
<i>Hegre Group</i>	<i>2392.000</i>
<i>Lunde Fm</i>	<i>2392.000</i>
<i>TD =</i>	<i>2929.000</i>