

Well no : 34/ 4-04 Operator : SAGA

Coordinates : 61 30 20.85 N UTM coord. : 6819527 N  
 02 14 09.54 E 459334 E

Licence no : 057 Permit no : 315

Rig : DYVI ALPHA Rig type : SEMI-SUB.

Contractor : DYVI OFFSHORE A/S

Bottom hole temperature : 122 deg.C Elev. KB : 25 M

Spud. date : 82.09.11 Water depth : 345 M

Compl. date : 83.02.03 Total depth : 3800 M

Spud. class : WILDCAT Form. at TD : TRIASSIC

Compl. class : P&A. OIL/GAS DISC. Prod. form :

Seisloca : SG 8020 - 201 SP 2295

## LICENSEES

5,000 AMERADA HESS NORGE A/S  
 10,000 AMOCO NORWAY OIL COMPANY  
 15,000 DEMINEX (NORGE) A/S  
 15,000 SAGA PETROLEUM A.S  
 50,000 DEN NORSKE STATS OLJESELSKAP A.S  
 5,000 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	493,0	36	493,0	
SURF.COND.	20	1200,0	26	1212,0	1,26
INTERM.	13 3/8	2098,0	17 1/2	2115,0	1,59
INTERM.	9 5/8	2792,0	12 1/4	2800,0	1,87
OPEN HOLE			8 1/2	3800,0	

## CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	2433.7 - 2444.8	10.4	93.7	UPPER TRIASSIC
2	2444.8 - 2457.9	12.3	93.9	UPPER TRIASSIC
3	2457.9 - 2472.2	13.4	93.7	UPPER TRIASSIC
4	2472.2 - 2482.6	10.4	100.0	UPPER TRIASSIC
5	2482.6 - 2489.3	5.6	83.6	UPPER TRIASSIC
6	2489.3 - 2501.9	12.6	100.0	UPPER TRIASSIC

## CONVENTIONAL CORES (Cont.)

Core no.	Intervals cored meters	Recovery		Series
		M	%	
7	2501.9 - 2519.5	17.6	100.0	UPPER TRIASSIC
8	2519.5 - 2535.0	15.5	100.0	UPPER TRIASSIC
9	2535.0 - 2548.6	10.4	76.5	UPPER TRIASSIC
10	2548.6 - 2566.8	18.2	100.0	UPPER TRIASSIC
11	2566.8 - 2578.3	9.3	80.9	UPPER TRIASSIC
12	2578.3 - 2595.4	15.8	92.4	UPPER TRIASSIC
13	2595.4 - 2614.4	11.3	59.5	UPPER TRIASSIC
14	2614.4 - 2624.4	6.9	69.0	UPPER TRIASSIC
15	2624.4 - 2638.4	10.2	72.9	UPPER TRIASSIC

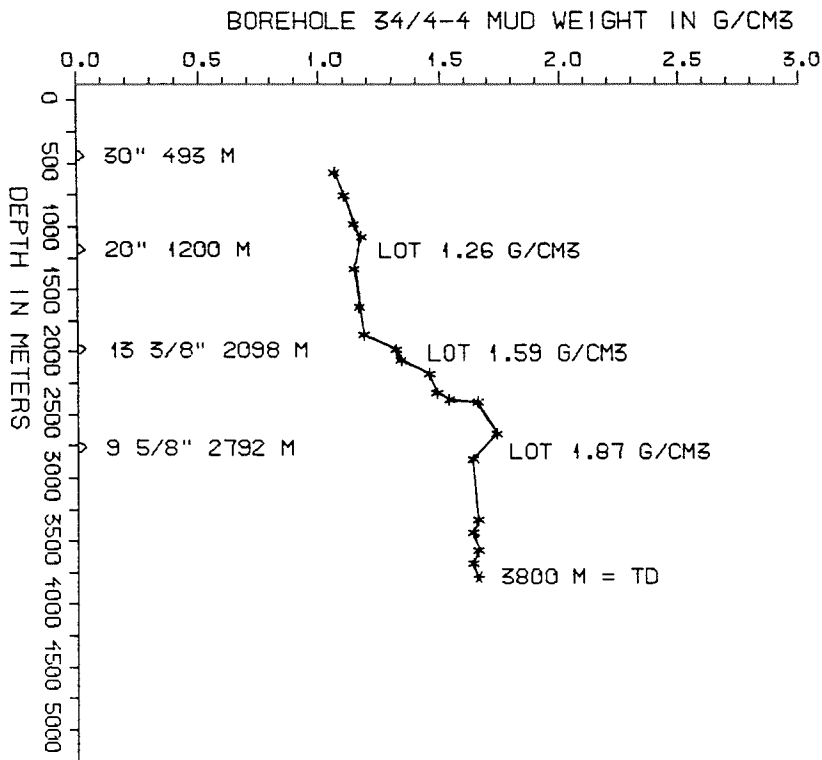
DRILL STEM TEST									
TEST NO	DEPTH BELOW KB	CHOKE SIZE mm	RECOVERY					PRESS. (psi)	
			OIL Sm <sup>3</sup> /d	GAS M Sm <sup>3</sup> /d	OIL GRAV. g/cm <sup>3</sup>	GAS GRAV. rel. air	GOR m <sup>3</sup> /m <sup>3</sup>	WHFP	BHP
			1	2618 - 2626	12.7	83.5	WATER		
2	2572 - 2578	10.3	461.1					1610	4710
3	2512 - 2516	6.3	54.0					250	2120
4	2429 - 2437	17.5	1749	200	0.83			2000	4600

AVAILABLE LOGS			
LOG TYPE	INTERVALS	1/200	1/500
ISF DDBHC GR	494 - 1213	x	x
ISF DDBHC	1200 - 2112	x	x
ISF DDBHC	2097 - 2796	x	x
ISF DDBHC MSFL NGL	2788 - 3796	x	x
LDL CNL	494 - 1213	x	x
LDT	1200 - 2113	x	x
LDL CNL	2097 - 2797	x	x
LDL CNL	2788 - 3797	x	x
DLL MSFL NGS	2097 - 2793	x	x
CDM	2097 - 2797	x	
CDM	2788 - 3798	x	
CDM AP	2099 - 2795	x	x
CDM AP	2790 - 3796	x	x
TEMPERATURE SURVEY	750 - 1516		x
NGS	2097 - 2793	x	
NGL	2788 - 3796	x	
RFT	1212 - 2115		
RFT	2893 - 3492		
CBL VDL CCL	1750 - 2785	x	
MUD	375 - 3800		x
VELOCITY (S.C.L.)	493 - 3800	1:5000	
(Geogram Synthetic Seismogram, 1:5000		1stk)	

MUD PROPERTIES			
DEPTH BELOW KB m	WEIGHT g/cm <sup>3</sup>	PLAST. VISC. mPa.s	FILTRATE LOSS cm <sup>3</sup>
530	1.03	15	
720	1.07	15	
900	1.11	7	
1070	1.14	7	
1270	1.11	7	
1610	1.13	9	
1780	1.15	11	
1910	1.28	18	
2020	1.30	18	
2140	1.42	27	
2260	1.45	24	
2350	1.50	25	
2370	1.62	25	
2600	1.70	19	
2810	1.60	23	
3260	1.62	15	
3360	1.60	17	
3510	1.62	16	
3620	1.60	20	

DRILL BIT CUTTINGS AND WET SAMPLES		
SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTINGS	500 - 3794	595
WET SAMPLES	500 - 3794	665

SHALLOW GAS	
DEPTH INTERVAL m KB	REMARKS
	NONE



## WELL HISTORY - 34/4-4

### GENERAL:

The primary objective of the exploration well 34/4-4 was to drill the untested Triassic stratigraphic sequence in the fault blocks west of well 34/4-1 (see WDSS vol.10). The well location was chosen to be stratigraphically higher relative to the Triassic sequence in well 34/4-1. The purpose of the well location was also to penetrate and core the maximum oil column above the tentative oil water contact interpreted in well 34/4-1. Oil was found in the Upper Triassic sandstones.

### OPERATIONS:

The well was spudded 11.09.82 by the semi-submersible rig Dyvi Alpha. 15 cores were cut in the Upper Triassic. After core number 12 was taken the mud was replaced with seawater by accident and caused a kick, resulting in a 20 bbls influx. The well was drilled using waterbased mud.

### TESTING:

Four DST's were performed in the Upper Triassic sandstones, three in the oil zone and one in the water zone. The test results were considered to be some of the best so far in the North Sea.

GEOLOGICAL TOPS  
WELL 34/4-4

	Depth m (RKB)
Nordland Group	370,0
Utsira Fm	1086,0
Hordaland Group	1158,0
Rogaland Group	1634,0
Balder Fm	1634,0
Lista/Sele Fm	1670,0
Shetland Group	1787,0
Cromer Knoll Group	2414,0
Hegre Group	2425,0
Lunde Fm	2425,0
Lomvi Fm	3143,0
Teist Fm	3228,0
TD =	3800,0