

Well no : 34/ 7-06 Operator : SAGA

Coordinates : 61 27 10.85 N UTM coord. : 6813713
 02 08 17.26 E 454048

Licence no : 89 Permit no : 457

Rig : TREASURE SAGA Rig type : SEMI-SUB.

Contractor : WILHELMSSEN OFFSHORE SERVICES

Bottom hole temperature : 104 deg.C Elev. KB : 26 M

Spud. date : 85.03.17 Water depth : 307 M

Compl. date : 85.05.30 Total depth : 3685 M

Spud. class : APPRAISAL Form. at TD : TRIASSIC

Compl. class : P&A. OIL DISCOVERY Prod. form : E. JURASSI

Seisloca : G/E - 106 SP. 420

LICENSEES

3.920000 DEMINEX (NORGE) A/S
 0.980000 DET NORSKE OLJESELSKAP AS
 7.840000 ELF AQUITAINE NORGE A/S
 14.700000 ESSO NORGE A.S
 11.760000 NORSK HYDRO PRODUKSJON A.S
 9.800000 SAGA PETROLEUM A.S.
 51.000000 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 ³
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CONDUCTOR	30	455.0	36	460.0	
SURF.COND.	20	935.0	26	965.0	1.55
INTERM.	13 3/8	1876.0	17 1/2	1895.0	1.91
INTERM.	9 5/8	3000.0	12 1/4	3015.0	2.01
OPEN HOLE			8 1/2	3685.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters		Recovery		Series
			M	%	
1	2516.0	2524.5	8.6	100.0	LOWER JURASSIC
2	2527.6	2542.6	15.2	98.0	LOWER JURASSIC
3	2543.0	2546.5	0.0	0.0	LOWER JURASSIC
4	2546.5	2549.0	0.0	0.0	LOWER JURASSIC
5	2549.0	2556.8	7.8	91.7	LOWER JURASSIC
6	2557.5	2568.5	11.0	100.0	LOWER JURASSIC
7	2568.5	2582.0	13.5	100.0	LOWER JURASSIC
8	2582.0	2594.5	12.5	100.0	LOWER JURASSIC
9	2598.5	2612.5	13.5	96.4	JURASSIC/TRIASSIC
10	2612.5	2624.0	11.5	100.0	UPPER TRIASSIC
11	2913.0	2925.5	12.5	100.0	UPPER TRIASSIC
12	2927.0	2953.0	26.0	100.0	UPPER TRIASSIC
13	3560.0	3578.5	18.5	100.0	MIDDLE TRIASSIC

MUD PROPERTIES

Depth below KB meter	Mud weight g/cm3	Funnel viscosity s/qt	Mud type
556.000	1.08		WATER BASED
759.000	1.10		WATER BASED
965.000	1.11		WATER BASED
970.000	1.10	47.0	WATER BASED
1551.000	1.20	51.0	WATER BASED
1878.000	1.46	53.0	WATER BASED
1895.000	1.50	59.0	WATER BASED
2076.000	1.58	60.0	WATER BASED
2287.000	1.68		WATER BASED
2445.000	1.72		WATER BASED
2514.000	1.70		WATER BASED
2516.000	1.72		WATER BASED
2823.000	1.70	50.0	WATER BASED
3017.000	1.64	53.0	WATER BASED
3070.000	1.55	60.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	2687.000 - 2679.000	12.7	82.7	3662.2	
2.0	2549.500 - 2572.500	7.9	2139.3	4658.6	
3.0	2518.500 - 2522.500	6.3	2651.3	5130.0	
3.1	2526.500 - 2536.500	12.7	2278.5	4906.6	

RECOVERY

Test no.	Oil Sm ³ /d	Gas Sm ³ /d	Oil grav. g/cm ³	Gas grav. rel. air	GOR m ³ /m ³
1.0					
2.0	519	3	0.834	0.862	66
3.0	391		0.837		20
3.1	1729	83	0.839	0.745	98

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	470 - 3685	595
Wet Samples	470 - 3685	450

SHALLOW GAS

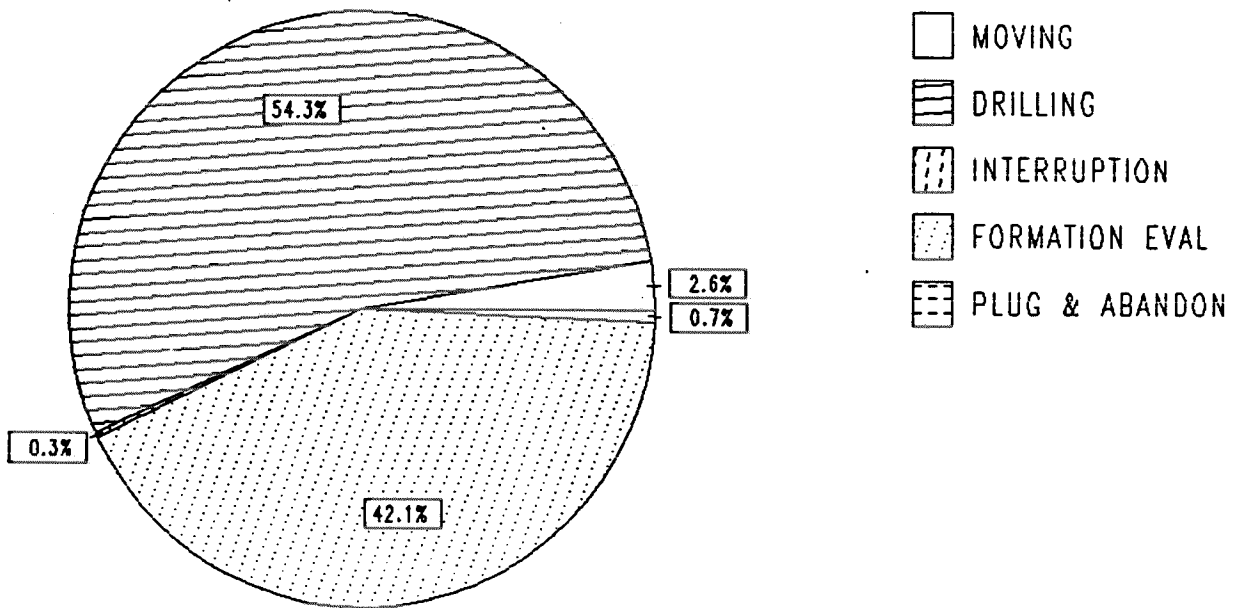
Interval below KB	REMARKS
	NONE

AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500
DIFL LS BHC AC CAL GR	935 - 1895	X <==>	X
DIFL LS BHC AC CAL	1878 - 3011	X <==>	X
DIFL LS BHC AC CAL	2999 - 3676	X <==>	X
CDL	935 - 1871	X <==>	X
CDL CNL	1878 - 3011	X <==>	X
CDL CNL	2999 - 3676	X <==>	X
DLL MLL	2452 - 3012	X <==>	X
CDM	1876 - 3004	X	
CDM	2999 - 3676	X	
CDM AP	1878 - 3008	X	X
CDM AP	2999 - 3676	X	X
SPECTRALOG	2450 - 3011	X <==>	X
FMT	2510 - 2732		X
FMT	2518 - 2865		X
FMT	2518 - 2865		X
FMT	3084 - 3642		X
CBL VDL AC	770 - 1876	X <==>	X
CBL VDL AC	1800 - 3000	X <==>	X
MUD	460 - 3685		X
VELOCITY	935 - 3676	1:1000	X
(+ Synthetic Seismogram, 10 cm/s,			5 stk)
(+ V.S.P., display 1-21, 10 cm/s,			21 stk)
(+ Two Way Travel Time, 5 + 10 cm/s,			2 stk)

DAILY DRILLING REPORT SYSTEM

Main operation : 34/07-06



Total : 1848 HRS

Main operation	Minutes	Hours	% of total
MOVING	2910	48.50	2.62
DRILLING	60180	1003.00	54.27
INTERRUPTION	330	5.50	0.30
FORMATION EVAL	46710	778.50	42.13
PLUG & ABANDON	750	12.50	0.68

MAIN OPERATIONS WELL : 34/07-06

MAIN OPERATION: DRILLING

Sub operations	Min	Hrs	% of total
TRIP	13170	219.50	21.88
DRILL	28080	468.00	46.66
CIRC/COND	3180	53.00	5.28
CASING	4920	82.00	8.18
OTHER	7380	123.00	12.26
REAM	270	4.50	0.45
WAIT	120	2.00	0.20
BOP/WELLHEAD EQ	1470	24.50	2.44
BOP ACTIVITIES	1530	25.50	2.54
SURVEY	60	1.00	0.10
TOTAL	60180	1003.00	

MAIN OPERATION: MOVING

Sub operations	Min	Hrs	% of total
TRANSIT	1950	32.50	67.01
ANCHOR	960	16.00	32.99
TOTAL	2910	48.50	

MAIN OPERATION: FORMATION EVAL

Sub operations	Min	Hrs	% of total
LOG	5280	88.00	11.30
CIRC/COND	2040	34.00	4.37
CORE	4830	80.50	10.34
TRIP	14220	237.00	30.44
OTHER	5610	93.50	12.01
DST	14430	240.50	30.89
WAIT	300	5.00	0.64
TOTAL	46710	778.50	

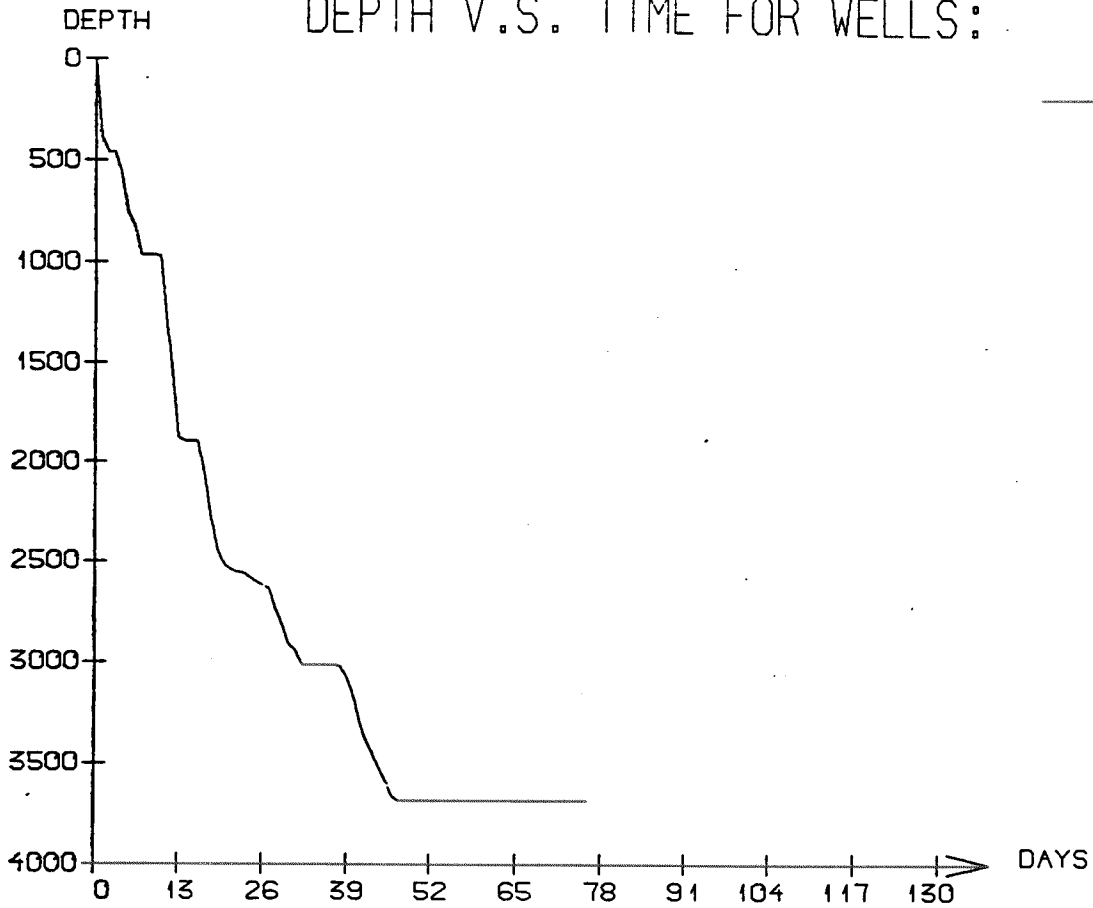
MAIN OPERATION: INTERRUPTION

Sub operations	Min	Hrs	% of total
MAINTAIN/REP	330	5.50	100.00
TOTAL	330	5.50	

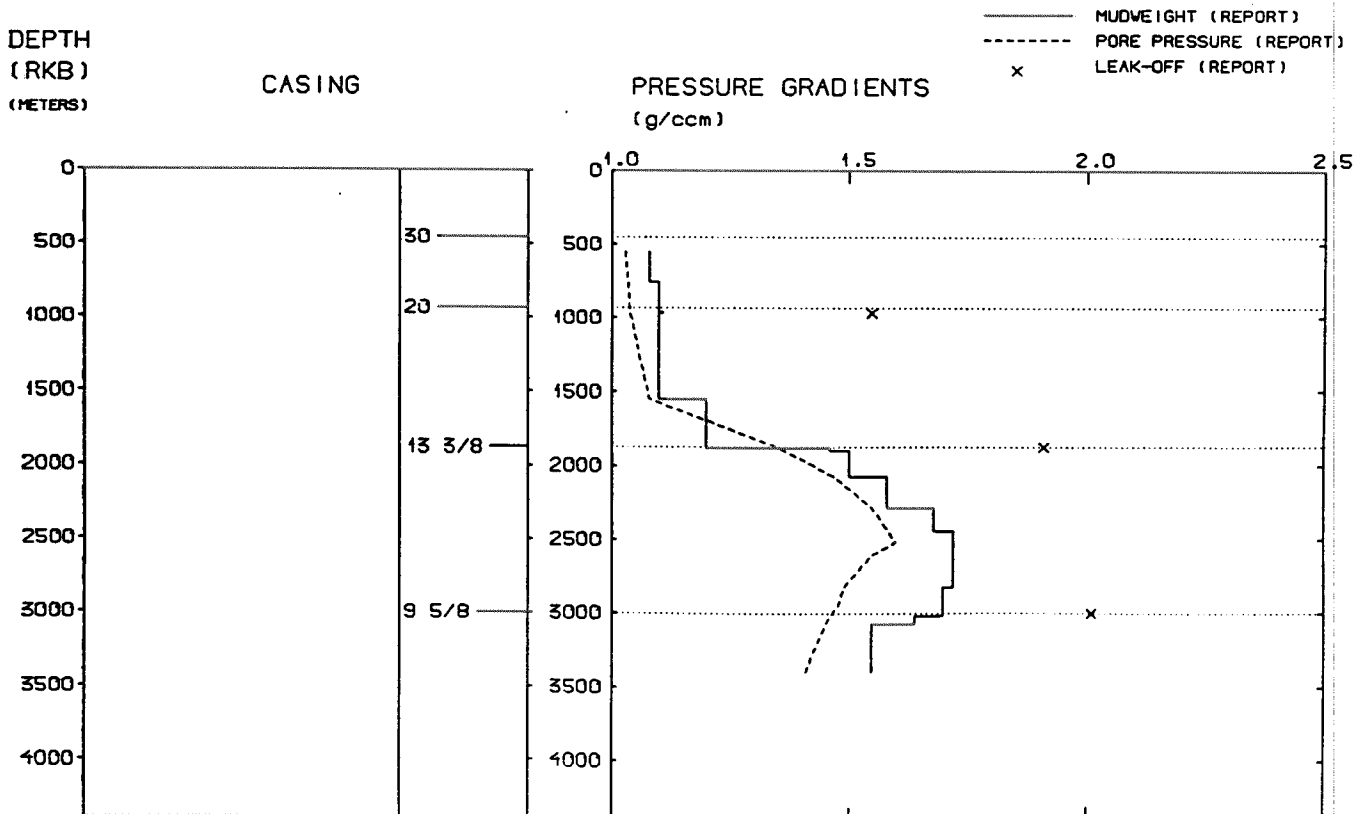
MAIN OPERATION: PLUG & ABANDON

Sub operations	Min	Hrs	% of total
OTHER	750	12.50	100.00
TOTAL	750	12.50	

DEPTH V.S. TIME FOR WELLS:



WELL: 003407 06 PRESSURE COMPOSITE PLOT



WELL HISTORY 34/7-6

GENERAL:

Appraisal well 34/7-6 was drilled in the northern part of the block, toward the geographic center of the Snorre-field. The Upper Triassic-Lower Jurassic reservoirs of the Snorre structure are tilted fault blocks dipping 5-7 degrees in a generally north-westerly direction.

The structure is divided into elongated fault blocks by major NNE-SSW trending faults, downthrown by up to 250 m to the east.

The objectives of well 34/7-6 were to test the reservoir quality of the Statfjord Formation, and the extent of the low gas/oil-ratio oil encountered in the 34/7-3 and 34/7-4 wells.

Further objectives of the well were to test the proposed subdivision and reservoir characteristics of the Upper Lunde Formation and the stratigraphy and reservoir of the Middle and Lower Lunde Formation and the Lomvi Formation.

OPERATIONS:

The well was spudded 17 March 1985 by the semi-submersible rig Teasure Saga.

The only significant problem occurring while drilling was partial loss of circulation while cementing 13 3/8" casing. Top Statfjord Formation came in at 2511 m RKB.

Hydrocarbons were encountered in the section belonging to the Statfjord Formation and the uppermost part of Upper Lunde formation.

The oil/water contact is set to approximately 2610 m. The exact depth is difficult to establish as this is in a shale interval.

The contact correlates very well with the contacts in wells 34/7-3 and 34/7-4.

13 cores were cut in the well.

TESTING:

Four Drill Stem Tests were performed in this well. One water test and three oil tests.

GEOLOGICAL TOPS

WELL: 34/07-06

	Depth m (RKB)
<i>Nordland Group</i>	333,0
<i>Utsira Fm</i>	1036,0
<i>Hordaland Group</i>	1072,0
<i>Rogaland Group</i>	1679,0
<i>Balder Fm</i>	1679,0
<i>Sele/Lista Fm</i>	1707,0
<i>Shetland Group</i>	1841,0
<i>Cromer Knoll Group</i>	2437,0
<i>Dunlin Group</i>	2447,0
<i>Amundsen Fm</i>	2447,0
<i>Statfjord Fm</i>	2511,0
<i>Hegre Group</i>	2596,0
<i>Lunde Fm</i>	2596,0
<i>Lomvi Fm</i>	3540,0
<i>Teist Fm</i>	3633,0
<i>TD=</i>	3685,0