Well no : 34/ 7-04 **Operator :** SAGA

Coordinates	*: 61 29 04.44 N 02 08 0.26 E*	*UTM coord.*	*: 6817231 453843*
Licence no	*: 89*	*Permit no*	*: 445*
Rig	*: TREASURE SAGA*	*Rig type*	*: SEMI-SUB.*
Contractor	*: WILHELMSEN OFFSHORE SERVICES*		
Bottom hole temperature	*: 75 deg.C*	*Elev. KB*	*: 26 M*
Spud. date	*: 84.11.19*	*Water depth*	*: 319 M*
Compl. date	*: 85.01.16*	*Total depth*	*: 3115 M*
Spud. class	*: WILDCAT*	*Form. at TD*	*: TRIASSIC*
Compl. class	*: P&A. OIL DISCOVERY*	*Prod. form*	*: E.JURASSI*
Seisloca	*: 61E-035 SP. 430*		

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/cm3*
CONDUCTOR	*30*	*469.0*	*36*	*473.0*	
SURF.COND.	*20*	*953.0*	*26*	*971.0*	*1.51*
INTERM.	*13 3/8*	*1915.0*	*17 1/2*	*1930.0*	*1.78*
INTERM.	*9 5/8*	*2745.0*	*12 1/4*	*2756.0*	*1.90*
OPEN HOLE			*8 1/2*	*3115.0*	

CONVENTIONAL CORES

Core no.	Intervals cored meters		Recovery M	Recovery %	Series
1	2533.0 -	2536.7	3.4	75.5	LOWER JURASSIC
2	2537.5 -	2552.5	15.0	100.0	LOWER JURASSIC
3	2552.5 -	2557.6	5.1	85.0	LOWER JURASSIC
4	2558.5 -	2559.0	0.0	0.0	LOWER JURASSIC
5	2559.0 -	2559.7	0.0	0.0	LOWER JURASSIC

MUD PROPERTIES

Depth below KB meter	Mud weigth g/cm3	Funnel viscosity s/qt	Mud type
408.000	1.03		WATER BASED
702.000	1.10	62.0	WATER BASED
971.000	1.15	56.0	WATER BASED
1117.000	1.14	48.0	WATER BASED
1552.000	1.27	48.0	WATER BASED
1652.000	1.32	48.0	WATER BASED
1903.000	1.37	48.0	WATER BASED
1930.000	1.44		WATER BASED
2286.000	1.56		WATER BASED
2381.000	1.60		WATER BASED
2498.000	1.69	50.0	WATER BASED
2810.000	1.60	50.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI) WHP	BTHP	FFP
1.0	2547.000 - 2563.000	9.5	1885.0	5485.3	

RECOVERY

Test no.	Oil Sm3/d	Gas Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1.0	865	35	0.833	0.740	34

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	485 - 3240	630
Wet Samples	490 - 3116	315

SHALLOW GAS

Interval below KB	REMARKS
	NONE

AVAILABLE LOGS

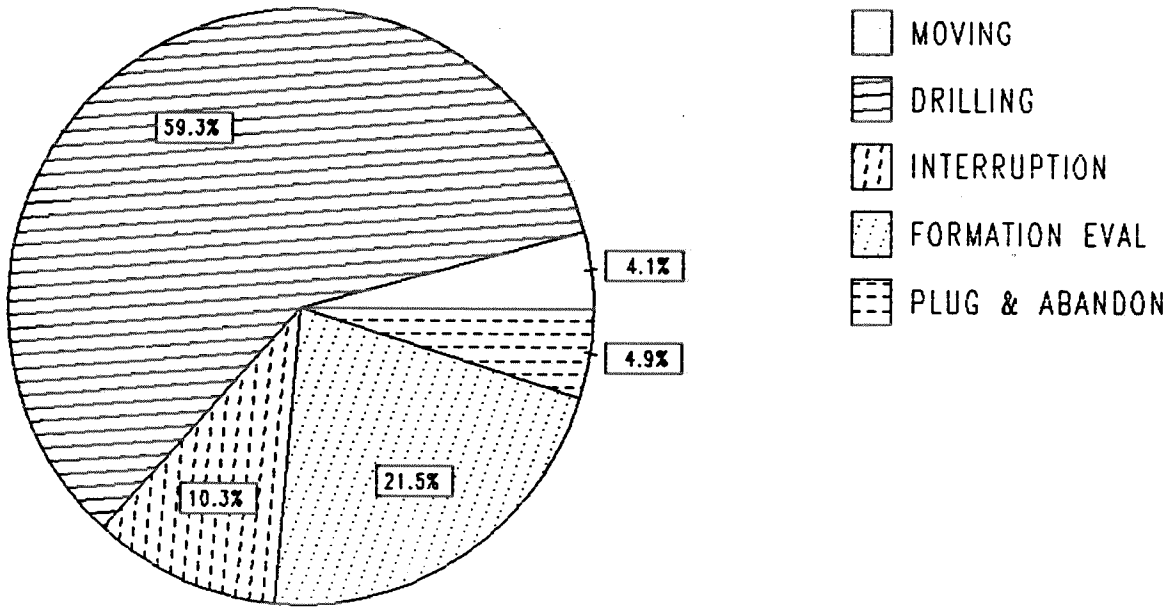
LOG TYPE	INTERVALS	1/200	1/500
* DIFL BHC GR	370 - 970	X <==>	X
* DIFL BHC AC	953 - 1930	X <==>	X
* DIFL BHC ACL	1916 - 2758	X <==>	X
* DIFL BHC ACL	2744 - 3118	X <==>	X
* CDL CNN	1916 - 2755	X <==>	X
* CDL CNN	2744 - 3074	X <==>	X
* DLL MLL	2450 - 2757	X <==>	X
CDM	1916 - 2750	X	
CDM	2744 - 3118	X	
CDM AP	1916 - 2750	X	X
CDM AP	2744 - 3118	X	X
* SPECTRALOG	1916 - 2750	X <==>	X
* SPECTRALOG	2744 - 3068	X <==>	X
* CALIPER	953 - 1930	X <==>	X
FMT	2537 - 2731		X
FMT	2783 - 3073		X
CBL VDL	660 - 1916	X	
CBL VDL	1050 - 2744	X	
MUD	480 - 3115		X
VELOCITY	469 - 3109	1:1000	X

(+ Synthetic Seismogram, Marine, 10 cm/s, 1 stk)
(+ Synthetic Seismogram, Marine, 20 cm/s, 1 stk)
(+ Synthetic Seismogram, Marine, 40 cm/s, 1 stk)
(+ Synthetic Seismogram, 10 + 20 + 40 cm/s, 6 stk)
(+ V.S.P., 10 cm/s, 9 stk)
(+ Airgun Well Velocity Survey and Calibr. data 1 stk)

* - BOTH SCALES ON SAME LOG

DAILY DRILLING REPORT SYSTEM

Main operation : 34/07-04



Total : 1440 HRS

Main operation	*Minutes*	*Hours*	*% of total*
MOVING	*3540*	*59.00*	*4.10*
DRILLING	*51210*	*853.50*	*59.27*
INTERRUPTION	*8880*	*148.00*	*10.28*
FORMATION EVAL	*18570*	*309.50*	*21.49*
PLUG & ABANDON	*4200*	*70.00*	*4.86*

MAIN OPERATIONS WELL : 34/07-04

MAIN OPERATION: DRILLING

Sub operations	Min	Hrs	% of total
BOP/WELLHEAD EQ	4380	73.00	8.55
TRIP	7740	129.00	15.11
DRILL	21330	355.50	41.65
CIRC/COND	3510	58.50	6.85
CASING	3210	53.50	6.27
WAIT	1020	17.00	1.99
PRESS DETECTION	120	2.00	0.23
UNDERREAM	2370	39.50	4.63
REAM	360	6.00	0.70
OTHER	6690	111.50	13.06
BOP ACTIVITIES	480	8.00	0.94
TOTAL	51210	853.50	

MAIN OPERATION: MOVING

Sub operations	Min	Hrs	% of total
TRANSIT	2130	35.50	60.17
ANCHOR	1410	23.50	39.83
TOTAL	3540	59.00	

MAIN OPERATION: FORMATION EVAL

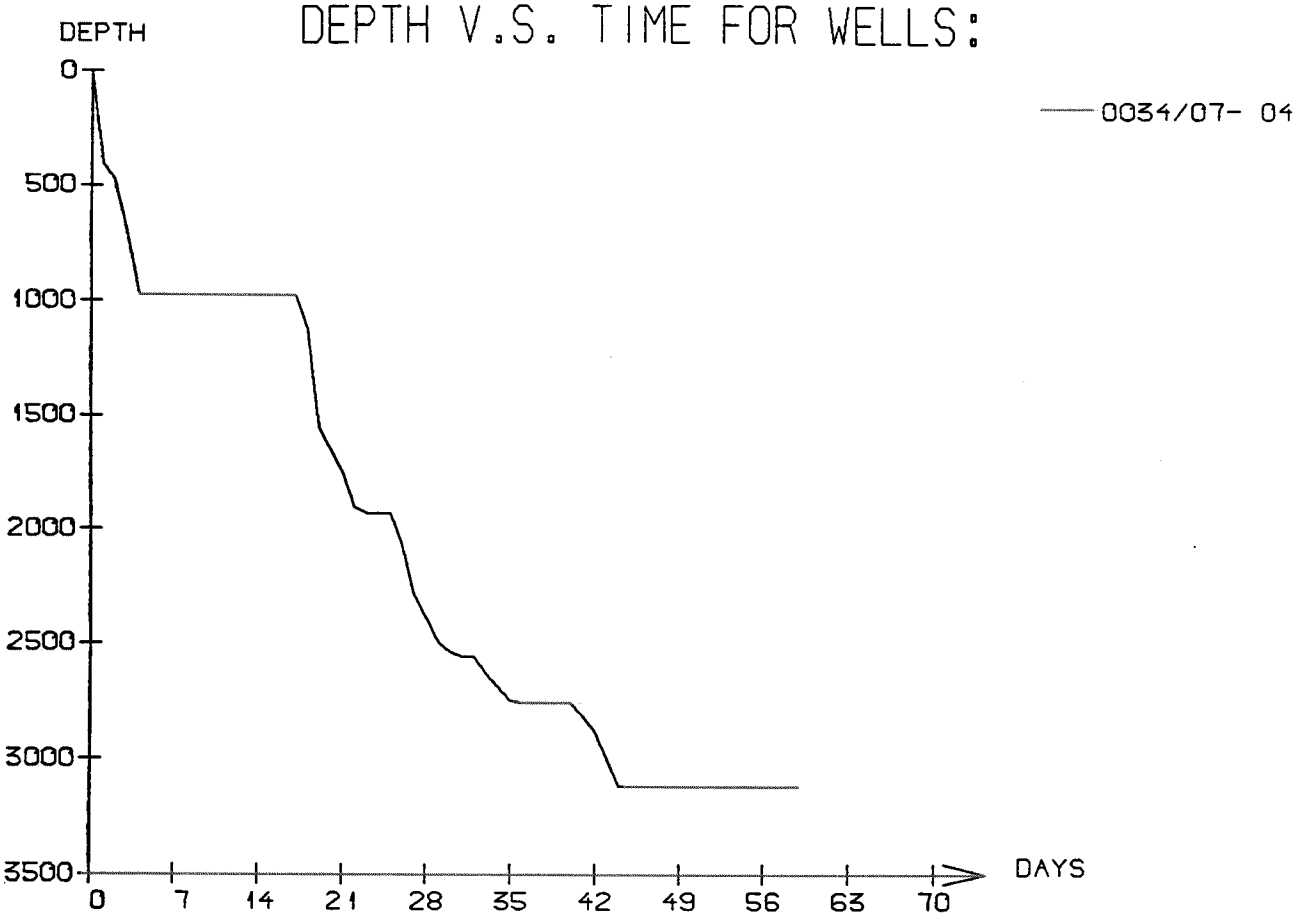
Sub operations	Min	Hrs	% of total
LOG	4560	76.00	24.56
CORE	1200	20.00	6.46
TRIP	5520	92.00	29.73
CIRC/COND	810	13.50	4.36
OTHER	2670	44.50	14.38
DST	3810	63.50	20.52
TOTAL	18570	309.50	

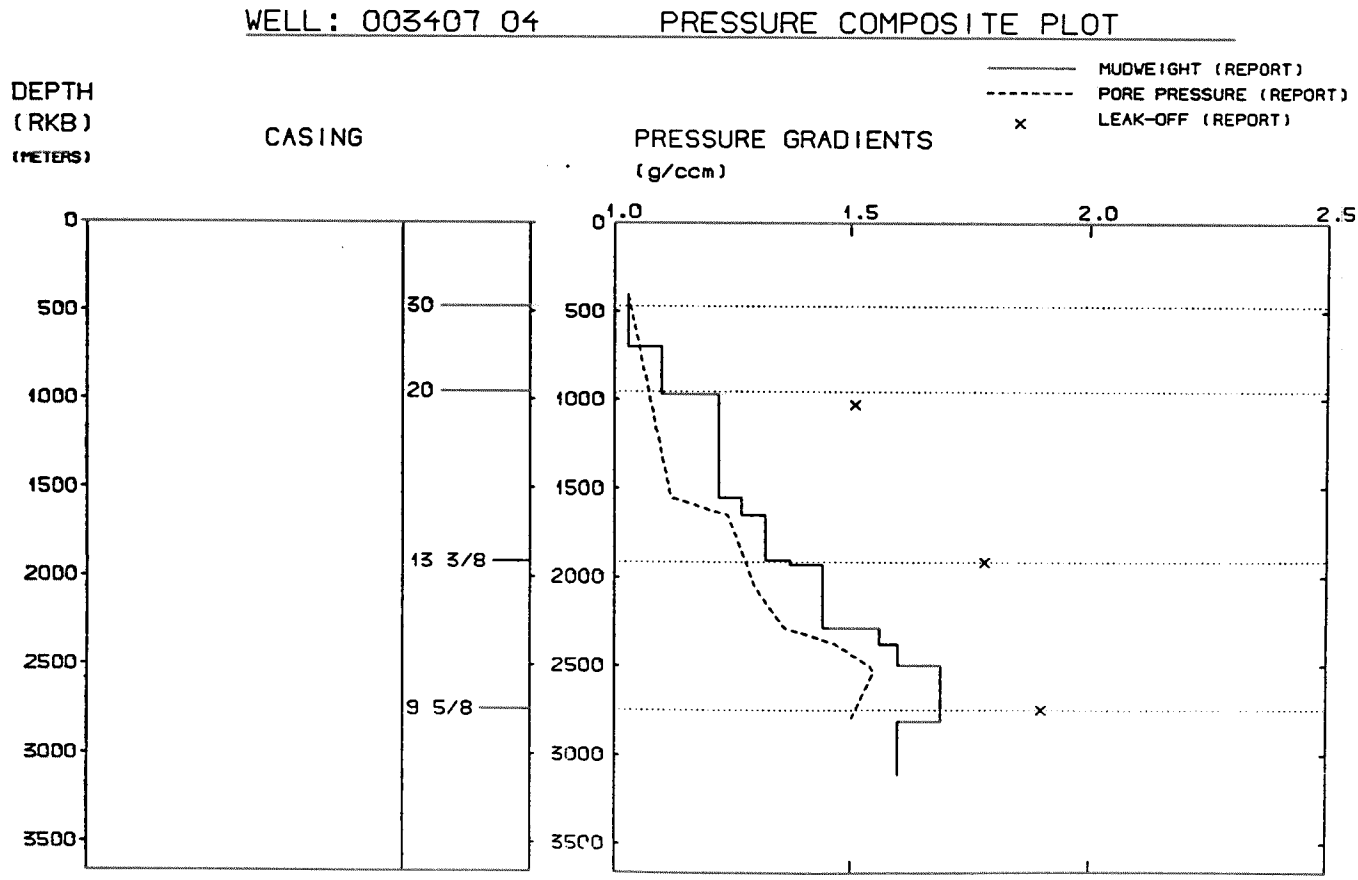
MAIN OPERATION: INTERRUPTION

Sub operations	Min	Hrs	% of total
MAINTAIN/REP	1320	22.00	14.86
WAIT	5310	88.50	59.80
OTHER	1860	31.00	20.95
FISH	390	6.50	4.39
TOTAL	8880	148.00	

MAIN OPERATION: PLUG & ABANDON

Sub operations	Min	Hrs	% of total
TRIP	1290	21.50	30.71
CIRC/COND	240	4.00	5.71
CEMENT PLUG	330	5.50	7.86
MECHANICAL PLUG	180	3.00	4.29
OTHER	210	3.50	5.00
PERFORATE	360	6.00	8.57
CUT	720	12.00	17.14
EQUIP RECOVERY	870	14.50	20.71
TOTAL	4200	70.00	


DEPTH V.S. TIME FOR WELLS:
DEPTH
0
500
1000
1500
2000
2500
3000
3500
0034/07- 04
0
7
14
21
28
35
42
49
56
63
70
DAYS


WELL: 003407 04
PRESSURE COMPOSITE PLOT
MUDWEIGHT (REPORT)
PORE PRESSURE (REPORT)
LEAK-OFF (REPORT)
DEPTH
(RKB)
(METERS)
CASING
PRESSURE GRADIENTS
(g/ccm)
0
500
1000
1500
2000
2500
3000
3500
30
20
13 3/8
9 5/8
1.0
1.5
2.0
2.5

WELL HISTORY 34/7-4

GENERAL:

Wildcat well 34/7-4 was drilled on the E-structure, in the northern part of the block.
The Late Triassic/Early Jurassic reservoirs of the E-structure are tilted fault blocks dipping in a westerly direction.
Reservoir seal is provided by Dunlin shales at the location and westwards. To the east and up-dip on the structure the seal is provided by Cretaceous, Shetland Group shales where Statfjord and Lunde Formations are eroded.
The objective of the well was in the Statfjord Formation, and the main purpose were to test the oil/water contact proven in well 34/7-1, and the reservoir quality in this area.
The secondary objective was to test reservoir potential of the Lunde Formation which contain oil in an up-dip location.

OPERATIONS:

The well was spudded 19 November 1984 by the semi-submersible rig Treasure Saga.
No significant problems occurred during drilling of the well.
Three cores were cut in the Statfjord Formation.
An oil bearing section of 92 m was found in the Statfjord Formation. The oil/water contact was found to be in a shale interval.
The deeper oil/water contact and the lower gass/oil ratio found in this well and in 34/7-3 indicate that the Snorre Field consist of at least 2 parts.

TESTING:

One Drill Stem Test was carried out in the Statfjord Formation, The test produced oil, and is considered to be good.

GEOLOGICAL TOPS

WELL: 34/07-04

	Depth m (RKB)
Nordland Group	*345,0*
Utsira Fm	*1033,5*
Hordaland Group	*1187,0*
Rogaland Group	*1685,0*
Balder Fm	*1685,0*
Sele/Lista Fm	*1711,5*
Shetland Group	*1847,5*
Cromer Knoll Group	*2495,5*
Dunlin Group	*2517,0*
Amundsen Fm	*2517,0*
Statfjord Fm	*2435,5*
Hegre Group	*2627,5*
Lunde Fm	*2627,5*
T.D.	*3115,0*