

Well no : 34/07-08 Operator : SAGA

Coordinates : 61 22 25.93 N UTM coord. : 6804894 N
 02 08 33.37 E 454171 E

Licence no : 89 Permit no : 503

Rig : TREASURE SAGA Rig type : SEMI-SUB.

Contractor : WILHELMSSEN OFFSHORE SERVICES

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

Spud. date : 86.02.05 Water depth : 286 M

Compl. date : 86.04.11 Total depth : 2766 M

Spud. class : WILDCAT Form. at TD : TRIASSIC

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

Seisloca : G/E - 281 SP. 410

LICENSEES

3.920000 DEMINEX (NORGE) A/S
 0.980000 DET NORSKE OLJESELSKAP A/S
 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	434.0	36	439.0	.
SURF.COND.	20	848.0	26	870.0	1.62
INTERM.	13 3/8	1859.0	17 1/2	1875.0	1.87
INTERM.	9 5/8	2525.0	12 1/4	2766.0	.

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	2280.0 - 2294.4	17.2	98.3	
2	2325.0 - 2344.7	19.7	100.0	
3	2346.0 - 2365.0	19.0	100.0	
4	2401.0 - 2406.4	5.4	100.0	

MUD PROPERTIES

Depth below KB meter	Mud weighth g/cm3	Viscosity	Mud type
439.000	1.03	0.0	WATER BASED
439.000	1.04	11.0	WATER BASED
747.000	1.12	10.0	WATER BASED
870.000	1.11	9.0	WATER BASED
870.000	1.03	0.0	WATER BASED

870.000	1.10	15.0	WATER BASED
1229.000	1.12	16.0	WATER BASED
1562.000	1.30	18.0	WATER BASED
1875.000	1.50	19.0	WATER BASED
2039.000	1.66	25.0	WATER BASED
2201.000	1.73	29.0	WATER BASED
2250.000	1.77	27.0	WATER BASED
2275.000	1.78	26.0	WATER BASED
2275.000	1.74	24.0	WATER BASED
2280.000	1.77	28.0	WATER BASED
2350.000	1.78	27.0	WATER BASED
2400.000	1.78	28.0	WATER BASED
2766.000	1.74	25.0	WATER BASED
2766.000	1.74	23.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	2374.000 - 2359.000 Test temperature: 85 °C	6.4	261.1	4954.4	2742.5
1.1	2405.000 - 2397.000 Test temperature: 85 °C	19.1	94.3	4365.7	1795.5
2.0	2334.000 - 2329.000 Test temperature: 86.2 °C	6.4	1435.8	5108.1	4142.1
3.0	2284.000 - 2276.000 Test temperature: 85.3 °C	17.5	1392.3	5042.8	4836.8

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	46	0	0.866	0.000	50
1.1	120	0	0.847	0.000	56
2.0	270	0	0.840	0.000	52
3.0	1300	0	0.830	0.000	53

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	450-2766	200
Wet Samples		

SHALLOW GAS

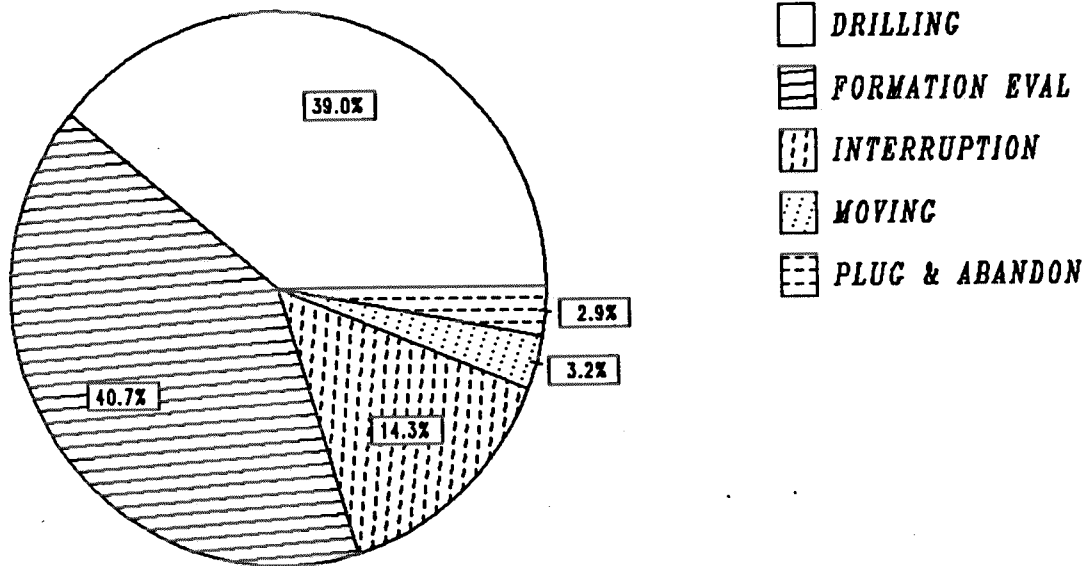
Interval below KB	REMARKS

AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500	Div.
DIFL LS BHC AC GR	310.000 - 870.100			
DIFL LSBHC AC GR CA	847.500 - 1873.900			
DIFL LS BHC AC GR	1856.000 - 2766.100	X	X	
CDL GR	310.000 - 850.000	X	X	
CDL GR	847.500 - 1854.100	X	X	
CDL CNL GR	1856.000 - 2765.800	X	X	
DLL MLL GR	2197.000 - 2765.800	X		
CDM	1856.000 - 2765.000	X		
CDM/4-ARM DIPLOG	1856.000 - 2765.000	X	X	
SPECTRALOG	2200.000 - 2758.000	X		
FMT HP CRYSTAL	2276.000 - 2687.000			X
FMT V.P.C	2277.000 - 2398.000			X
ACBL VDL	1400.000 - 2469.000	X		
ACBL VDL	2303.000 - 2450.000	X		
WIRELINE DATA	312.000 - 2766.000		1:5000	
DRILLING DATA	312.000 - 2766.000		1:5000	
PRESSURE DATA	312.000 - 2766.000		1:5000	
TEMPERATUR				
MUD LOG	350.000 - 2766.000			X
VELOCITY LOG	438.000 - 2754.000		1:1000X	
(Display of well velocity records, 1-3				3 stk.)
(Airgun well velocity survey/calibrated data				1 stk.)
(Two-way travel time 5+10cm/s				2 stk.)
(Synthetic seismogram, 10cm/s				5 stk.)
(VSP.Stacked geophone data, 10cm/s				11 stk.)

DAILY DRILLING REPORT SYSTEM

Main operations for well : 0034/07 -08



Total : 1632.00 hours

Main operation	Minutes	Hours	% of total
DRILLING	38160	636.00	38.97
FORMATION EVAL	39810	663.50	40.66
INTERRUPTION	13980	233.00	14.28
MOVING	3090	51.50	3.16
PLUC & ABANDON	2880	48.00	2.94

MAIN OPERATIONS FOR WELL : 0034 / 07 - 08

MAIN OPERATION : DRILLING

Sub operations	Minutes	Hrs	% of total
BOP ACTIVITIES	930	15.50	2.44
BOP/WELLHEAD EQ	4710	78.50	12.34
CASING	7860	131.00	20.60
CIRC/COND	2910	48.50	7.63
DRILL	12660	211.00	33.18
OTHER	990	16.50	2.59
REAM	180	3.00	0.47
SURVEY	270	4.50	0.71
TRIP	6600	110.00	17.30
UNDERREAM	1050	17.50	2.75
Total	38160	636.00	100.00

MAIN OPERATION : FORMATION EVAL

Sub operations	Minutes	Hrs	% of total
CIRC/COND	510	8.50	1.28
CORE	1650	27.50	4.14
DST	19650	327.50	49.36
LOG	7470	124.50	18.76
OTHER	2610	43.50	6.56
TRIP	7920	132.00	19.89
Total	39810	663.50	100.00

MAIN OPERATION : INTERRUPTION

Sub operations	Minutes	Hrs	% of total
FISH	360	6.00	2.58
LOST CIRC	450	7.50	3.22
MAINTAIN/REP	1380	23.00	9.87
OTHER	1830	30.50	13.09
WAIT	9960	166.00	71.24
Total	13980	233.00	100.00

MAIN OPERATION : MOVING

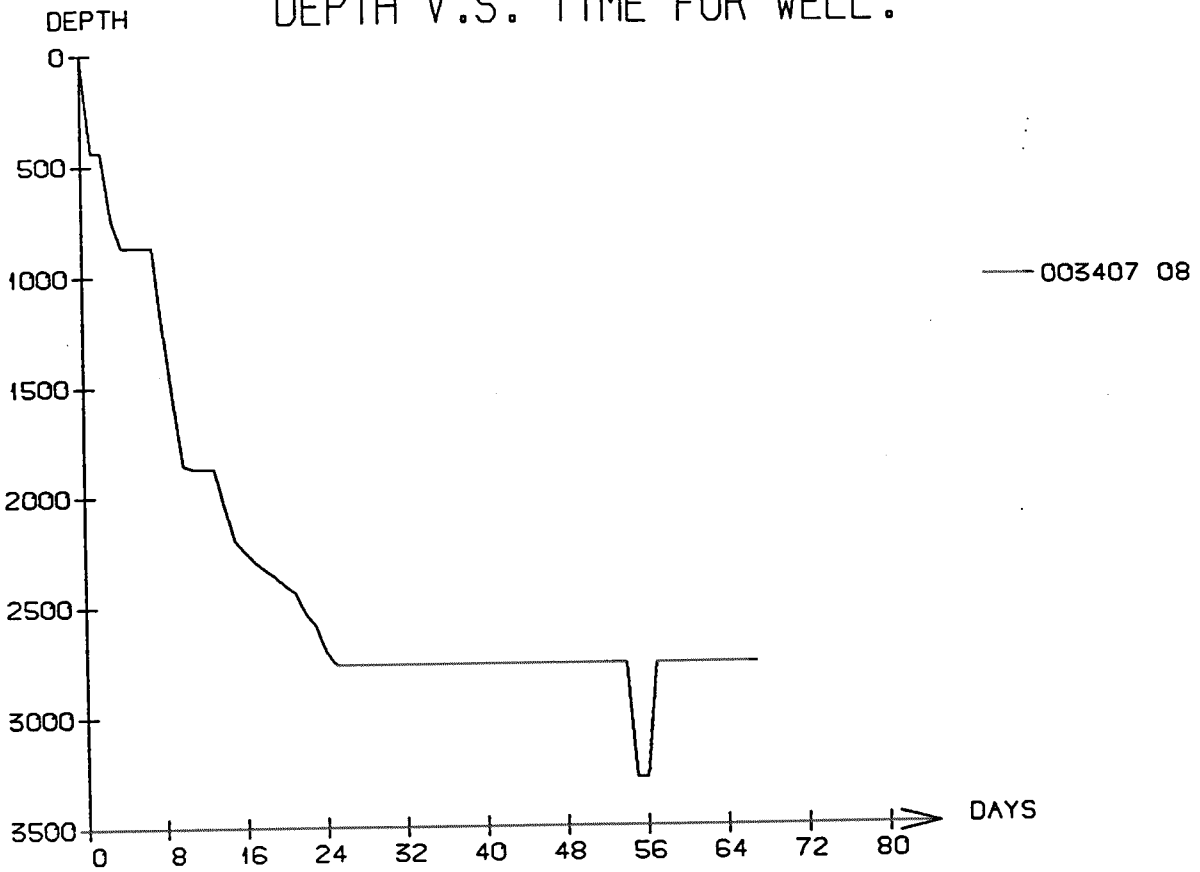
Sub operations	Minutes	Hrs	% of total
ANCHOR	3090	51.50	100.00
Total	3090	51.50	100.00

MAIN OPERATION : PLUG & ABANDON

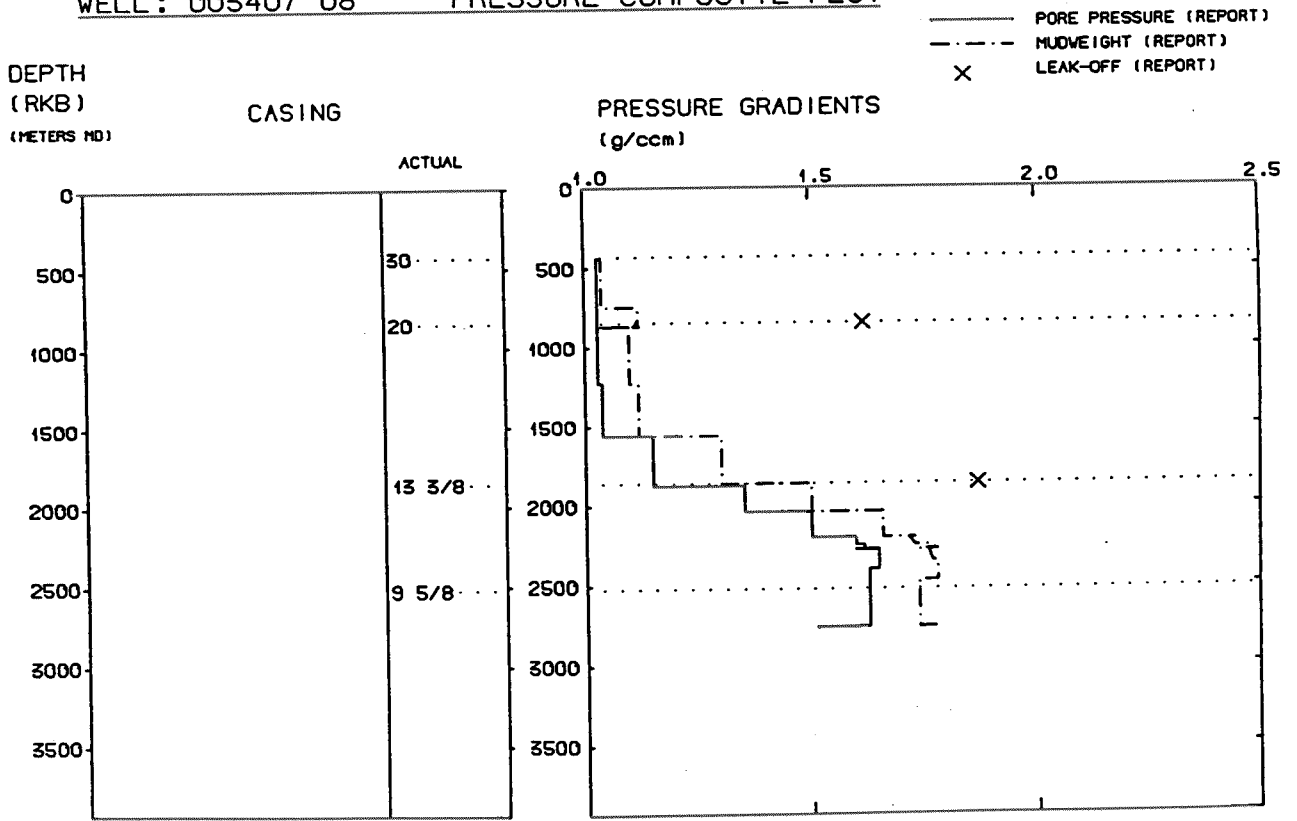
Sub operations	Minutes	Hrs	% of total
CEMENT PLUG	150	2.50	5.21
CUT	840	14.00	29.17
EQUIP RECOVERY	900	15.00	31.25
OTHER	60	1.00	2.08
PERFORATE	210	3.50	7.29
TRIP	720	12.00	25.00
Total	2880	48.00	100.00

Total time used 1632.00 hrs

DEPTH V.S. TIME FOR WELL:



WELL: 003407 08 PRESSURE COMPOSITE PLOT



Well History 34/7-8

GENERAL:

Well 34/7-8 was drilled on the "C" structure which is located south of the main Snorre field area. The Late Triassic - Early Jurassic reservoirs of the structure are tilted fault blocks dipping in a generally north westerly direction. The "C" structure is defined by a major west bounding fault with throws up to 350 m in the northwest, diminishing to 20 m at the southern end.

The main objectives were to test the quality and thickness of the Statfjord Fm. and the Upper Lunde Fm. Further objectives were to test the fluid content of the structure and sealing effect of the "C" horst fault.

OPERATIONS:

Wildcat well 34/7-8 was spudded 5 February 1986 by Wilh. Wilhelmsen offshore Services semi-submersible rig Treasure Saga and completed 11 April 1986 at a depth of 2766 m in Triassic rocks. Drilling proceeded without any significant problems.

4 cores were cut in the well. One core was cut in the interval 2280 - 2294.4 m, 2 in the interval 2325 - 2365 m, and one in the interval 2401 - 2406.4 m. The top of the reservoir came in 75 m higher up than prognosed. Oil/water contact was hard to define from the logs due to a transition zone.

The well is plugged and abandoned as an oil discovery.

TESTING:

3 DST tests were performed in this hole. DST 1 was in the intervals 2359 - 2374 m and 2397 - 2405 m, DST 2 in the Statfjord Fm. and DST 3 in the Intra-Heather sandstones.

GEOLOGICAL TOPS

WELL: 34/7-8

Depth m (RKB)

<i>Nordland Group</i>	312.0
<i>Utsira Group</i>	970.0
<i>Hordaland Group</i>	1105.0
<i>Skade Fm.</i>	1264.0
<i>Grid Fm.</i>	1445.0
<i>Rogaland Group</i>	1658.0
<i>Balder Fm.</i>	1658.0
<i>Sele Fm.</i>	1693.0
<i>Lista Fm.</i>	1744.0
<i>Shetland Group</i>	1832.5
<i>Jorsalfare Fm.</i>	1832.5
<i>Kyrre Fm.</i>	1927.5
<i>Viking Group</i>	2275.0
<i>Intra-Heather sandstones</i>	2275.0
<i>Dunlin Group</i>	2284.0
<i>Amundsen Fm.</i>	2284.0
<i>Statfjord Fm.</i>	2299.0
<i>Hegre Group</i>	2373.0
<i>Lunde Fm.</i>	2373.0
<i>T.D.</i>	2766.0