

Well no : 31/ 3-03

Operator : SAGA

Coordinates	: 60 50 02.29 N 03 50 38.16 E	UTM coord.	: 6744748 N
		UTM zone 31	: 545884 E
Licence no	: 085	Permit no	: 438
Rig	: TREASURE SAGA	Rig type	: SEMI-SUB.
Contractor	: WILHELMSSEN OFFSHORE SERVICES		
Bottom hole temperature	: 64 deg.C	Elev. KB	: 26 M
Spud date	: 84.10.13	Water depth	: 332 M
Compl. date	: 84.11.18	Total depth	: 2573 M
Spud class.	: WILDCAT	Age at TD	: TRIASSIC
Compl. class.	: P&A. DRY HOLE		
Seis. loc.	: ST 8007 - 347 SP. 781		

LICENSEES

9.000	NORSK HYDRO PRODUKSJON A.S
6.000	SAGA PETROLEUM A.S.
85.000	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 ³
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CONDUCTOR	30	481.0	36	486.0	
SURF.COND.	20	805.0	26	1143.0	1.60
INTERM.	13 3/8	1616.0	17 1/2	1764.0	1.54
OPEN HOLE			12 1/4	2573.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	1580.0 - 1596.0	16.0	99.9	LOWER CRETACEOUS
2	1764.0 - 1782.0	18.0	99.9	UPPER JURASSIC
3	1782.0 - 1810.0	18.0	99.9	UPPER JURASSIC
4	1810.0 - 1837.5	27.5	99.9	UPPER JURASSIC
5	1837.5 - 1861.0	23.5	91.5	UPPER JURASSIC
6	1861.0 - 1888.5	27.5	99.9	UPPER JURASSIC
7	1888.5 - 1916.5	28.0	99.9	MIDDLE JURASSIC

MUD PROPERTIES

Depth below KB meter	Mud weight g/cm ³	Plastic viscosity mPa.s	Mud type
760.0	1.10	20.0	WATER BASED
820.0	1.14	14.0	WATER BASED
1358.0	1.20	16.0	WATER BASED
1764.0	1.18	29.0	WATER BASED
1916.5	1.20	26.0	WATER BASED
2257.0	1.16	24.0	WATER BASED

DRILL STEM TEST

NO DST'S WERE PERFORMED IN THIS WELL

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTINGS	490 - 2573	520
WET SAMPLES	490 - 2573	250

SHALLOW GAS

INTERVAL BELOW KB	REMARKS
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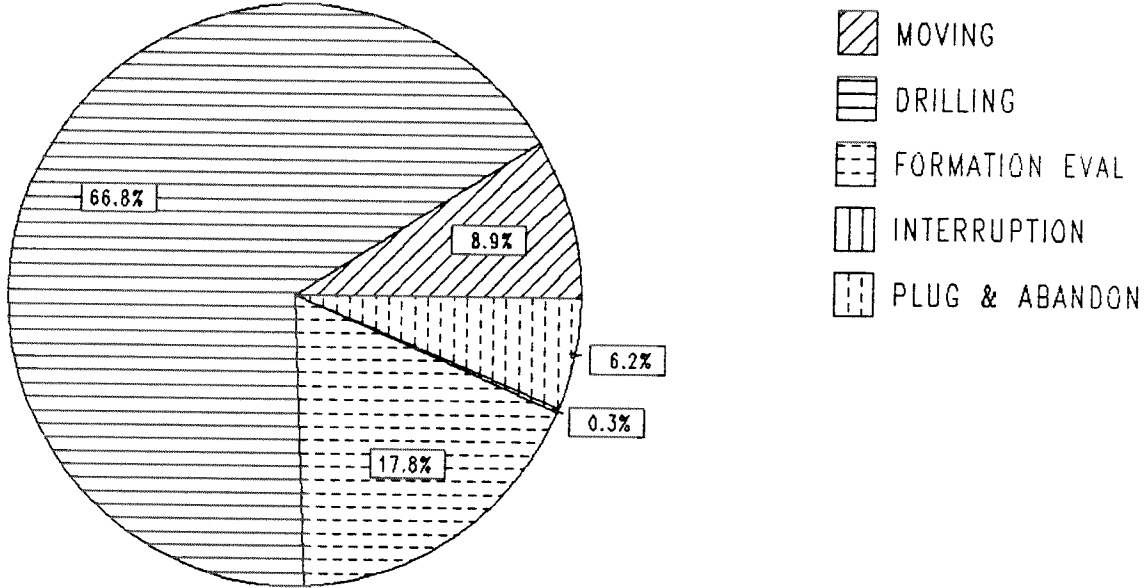
NONE

AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500
*DIFL BHC AC GR	481 - 816	X <==>	X
*DIFL BHC AC	805 - 1633	X <==>	X
*DIFL BHC AC	1615 - 2573	X <==>	X
*CDL CNL	805 - 1633	X <==>	X
*CDL CNL	1615 - 2575	X <==>	X
CDM	1623 - 2573	X	
CDM AP	1623 - 2573	X	X
STRATADIP	1623 - 2573		1:25
*SPECTRALOG	1615 - 2566	X <==>	X
*CALIPER LOG	566 - 632	X <==>	X
FMT	1775 - 2493		X
CBL VDL AC	667 - 1621	X	
TEMPERATURE DATA	486 - 2573		1:5000
DRILLING DATA PRESSURE	486 - 2573		1:5000
PRESSURE EVALUATION	486 - 2573		1:5000
MUD	486 - 2573		X
VELOCITY	485 - 2564		1:1000 X
(+ Airgun Well Velocity Survey and Calibr. data,			1 stk)
(+ Synthetic Seismogram, Marine, 10 cm/s,			1 stk)
(+ Synthetic Seismogram, 10 cm/s,			4 stk)
* BOTH SCALES ON THE SAME LOG			

DAILY DRILLING REPORT SYSTEM

Main operation : 31/03-03



Total : 936.00 HRS

Main operation	Minutes	Hours	% of total
MOVING	5010	83.50	8.9
DRILLING	37500	625.00	66.7
FORMATION EVAL	10020	167.00	17.8
INTERRUPTION	150	2.50	0.2
PLUG & ABANDON	3480	58.00	6.1

MAIN OPERATION: MOVING

Sub operations	Min	% of total
TRANSIT	2190	43.71
ANCHOR	2820	56.29
TOTAL	5010	100.00

MAIN OPERATION: DRILLING

Sub operations	Min	% of total
TRIP	7951	21.20
DRILL	16137	43.03
SURVEY	360	0.96
CIRC/COND	3033	8.09
CASING	1770	4.72
OTHER	5370	14.32
REAM	2249	6.00
BOP ACTIVITIES	630	1.68
TOTAL	37500	100.00

MAIN OPERATION: FORMATION EVAL

Sub operations	Min	% of total
CORE	3180	31.74
TRIP	2190	21.86
OTHER	690	6.89
CIRC/COND	330	3.29
LOG	3630	36.23
TOTAL	10020	100.00

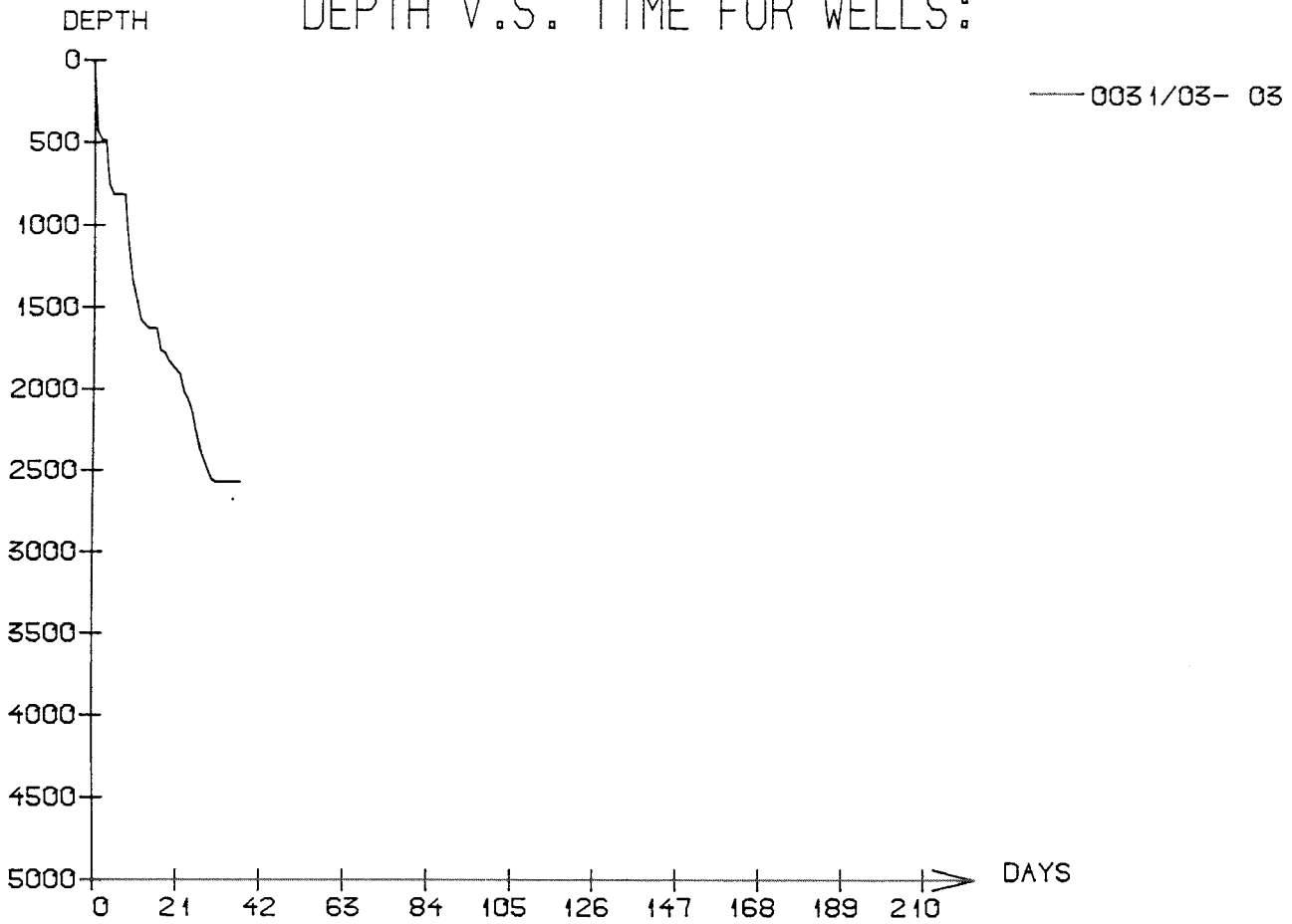
MAIN OPERATION: INTERRUPTION

Sub operations	Min	% of total
MAINTAIN/REP	150	100.00
TOTAL	150	100.00

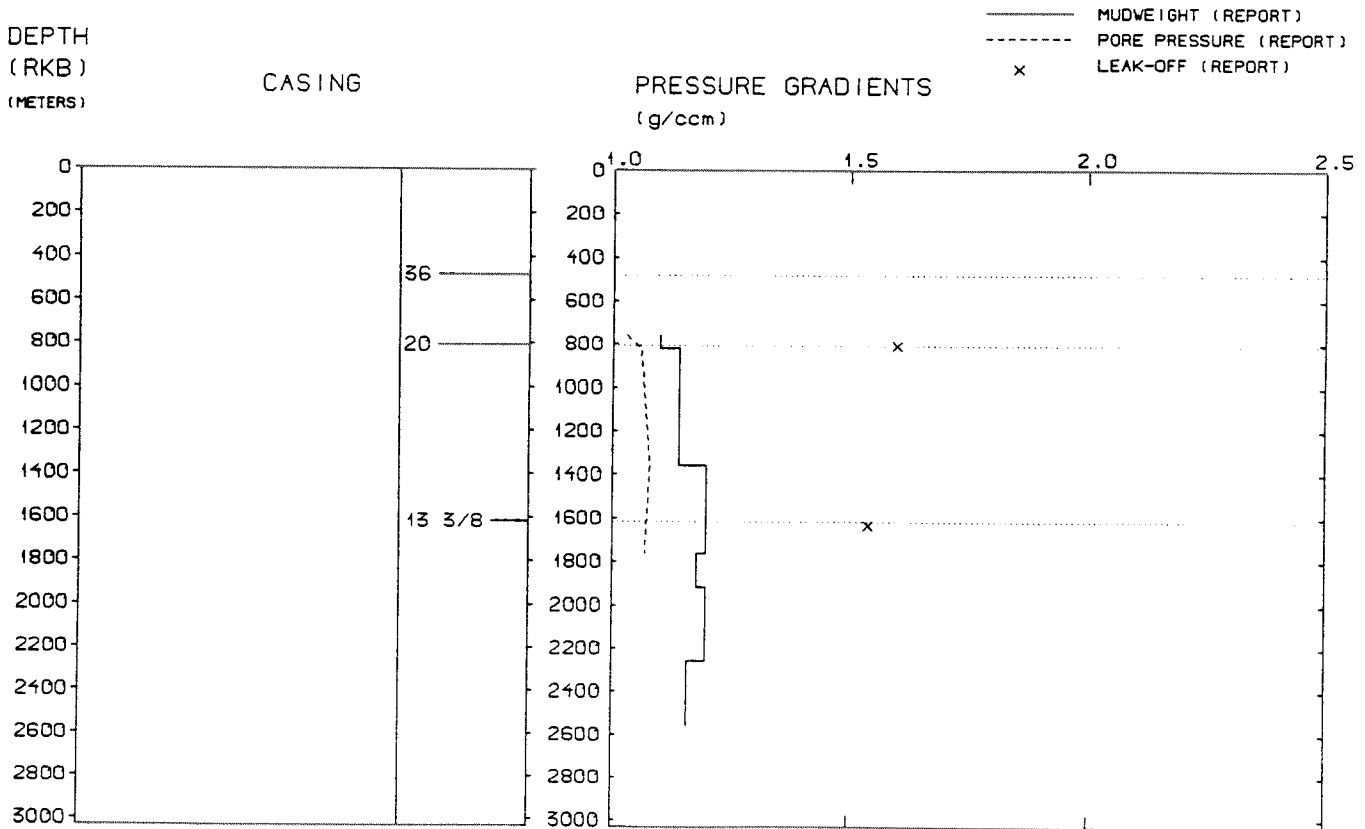
MAIN OPERATION: PLUG & ABANDON

Sub operations	Min	% of total
TRIP	630	18.10
CEMENT PLUG	750	21.55
MECHANICAL PLUG	210	6.03
PERFORATE	210	6.03
OTHER	630	18.10
CUT	300	8.62
EQUIP RECOVERY	750	21.55
TOTAL	3480	100.00

DEPTH V.S. TIME FOR WELLS:



WELL: 003103 03 PRESSURE COMPOSITE PLOT



WELL HISTORY - 31/3-3

GENERAL:

The main objective of the wildcat 31/3-3 was to test the Upper Jurassic Sognefjord Formation. Secondary objectives were a test of a possible stratigraphic trap in the Lower Cretaceous sequence and small closures of the Brent Group and Statfjord Formation. The well did not encounter any hydrocarbons.

OPERATIONS:

The wildcat 31/3-3 was spudded 13.10.84 by the semi-submersible rig Treasure Saga. One core was cut in the Lower Cretaceous sequence and six cores were cut in the Upper to Middle Jurassic sequence. No major problems occurred due to drilling. The well was drilled using water based mud.

TESTING:

The well was not tested.

NOTE:

The three licensees in licence 085 are equal, they do all three operate boreholes in the licence.

GEOLOGICAL TOPS

WELL: 31/ 3-03

	Depth m (RKB)
<i>Nordland Group</i>	358.000
<i>Hordaland Group</i>	540.000
<i>Rogaland Group</i>	826.000
<i>Balder Fm</i>	826.000
<i>Sele Fm</i>	914.000
<i>Lista Fm</i>	1085.000
<i>Shetland Group</i>	1230.000
<i>Cromer Knoll Group</i>	1378.000
<i>Viking Group</i>	1633.000
<i>Draupne Fm</i>	1633.000
<i>Upper Heather Fm</i>	1747.000
<i>Sognefjord Fm</i>	1753.000
<i>Middle Heather Fm</i>	1905.000
<i>Fensfjord Fm</i>	1931.000
<i>Krossfjord Fm</i>	2077.000
<i>Lower Heather Fm</i>	2134.000
<i>Brent Group</i>	2163.000
<i>Dunlin Group</i>	2209.000
<i>Drake Fm</i>	2209.000
<i>Upper Amundsen Fm</i>	2293.000
<i>Johansen Fm</i>	2306.000
<i>Lower Amundsen Fm</i>	2407.000
 <i>Statfjord Fm</i>	2432.000
 <i>TD =</i>	 2573.000