Well no : 31/5-02 AND 31/5-02 R Operator : SAGA

Coordinates	: 60 43 33.29 N 03 32 52.74 E	UTM coord. UTM zone 31	: 6732542 N 529894 E
Licence no	: 085	Permit no	: 391
Rig	: TREASURE SAGA	Rig type	: SEMI-SUB.
Contractor	: WILHELMSEN OFFSHORE SERVICES		
Bottom hole temperature	: 73 deg.C	Elev. KB	: 26 M
Spud date Re-entry	: 83.10.05 : 84.06.11	Water depth	: 316 M
Compl. date Re-entry	: 83.11.11 : 84.08.30	Total depth	: 2500 M
Spud class.	: WILDCAT	Age at TD	: TRIASSIC
Compl. class. Re-entry	: SUSP. OIL/GAS DISC. : P&A. OIL/GAS DISC.		
Seis. loc.	: ST 8007 - 132 SP 884		

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/cm3
CONDUCTOR	30	415.0	36	418.0	
SURF.COND.	20	848.0	26	860.0	1.53
INTERM.	13 3/8	1415.0	17 1/2	1430.0	1.63
INTERM.	9 5/8	1952.0	12 1/4	1965.0	1.63
OPEN HOLE			8 1/2	2500.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery M	Recovery %	Series
1	1505.0 - 1506.8	0.5	27.8	UPPER JURASSIC
2	1506.8 - 1524.8	15.1	83.9	UPPER JURASSIC
3	1524.8 - 1543.2	17.7	96.2	UPPER JURASSIC
4	1543.2 - 1570.5	27.2	99.6	UPPER JURASSIC
5	1570.5 - 1589.0	17.7	95.7	UPPER JURASSIC
6	1589.0 - 1617.0	12.4	44.3	UPPER JURASSIC

MUD PROPERTIES

Depth below KB meter	Mud weigth g/cm3	Plastic viscosity mPa.s	Mud type
894.0	1.10	17.0	WATER BASED
1277.0	1.34	20.0	WATER BASED
1435.0	1.27	16.0	WATER BASED
2008.0	1.23	13.0	WATER BASED
2088.0	1.21	14.0	WATER BASED
2350.0	1.17	13.0	WATER BASED
2467.0	1.20	11.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no.	Interval meter	Choke size	Pressure (PSI) FSIP	BTHP	WHFP
1.0	1581.0 - 1577.0	25.4		2161.0	294.4
2.0	1576.0 - 1574.0	44.5+23.8		1844.8	200.1
3.0	1554.5 - 1546.5	44.5		2100.0	994.9

RECOVERY

Test no.	Oil Sm3/d	Gas M Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1.0	447		0.896	0.660	53
2.0	1089		0.890	0.660	53
3.0		1240	*0.780	0.610	

* - CONDENSATE

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTINGS	1240 - 2439	480
WET SAMPLES	870 - 2500	280

SHALLOW GAS

INTERVAL BELOW KB	REMARKS
513 M	MAX. 2% GAS READINGS

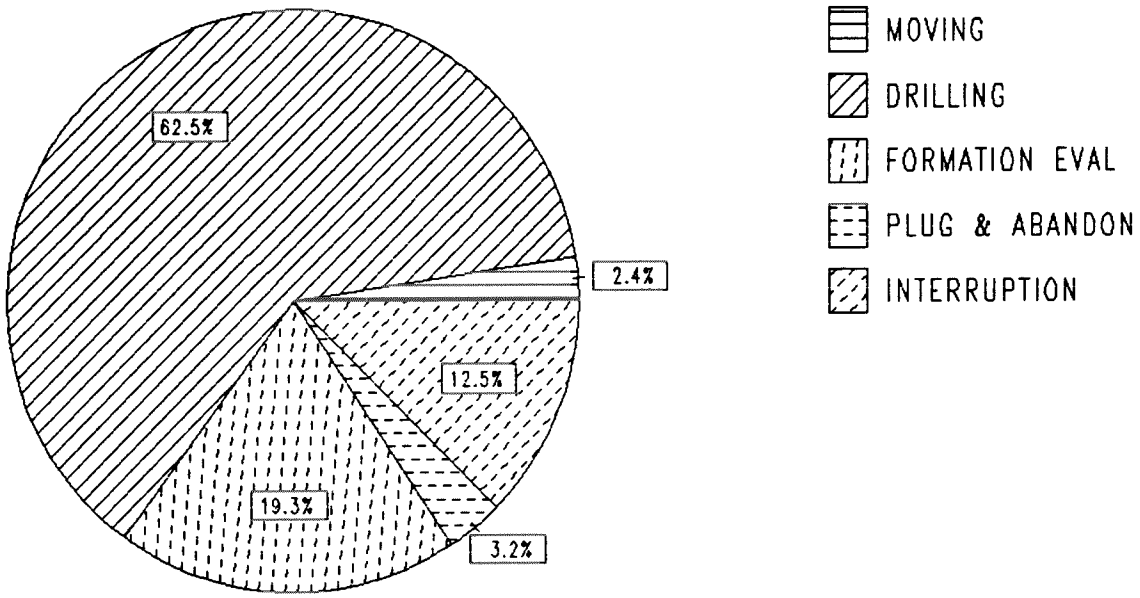
AVAILABLE LOGS

LOG TYPE	INTERVAL	1/200	1/500
DIFL BHC GR AC	848 - 1422	X	X
DIFL BHC AC	1415 - 1963	X	X
DIFL BHC AC	1951 - 2495	X	X
DLL MLL	1415 - 1962	X	X
FDC	848 - 1418	X	X
FDC CNL	1415 - 1961	X	X
FDC CNL	1951 - 2492	X	X
GR CCL AND BRIDGE PLUG	1446 - 1635	X	
CDM	1415 - 1962	X	
CDM	1947 - 2489	X	
CDM AP	1415 - 1962	X	X
CDM AP	1947 - 2489	X	X
CDM STICK PLOT 270'-90'	1500 - 1800	1:20	
STRATADIP	1415 - 1962	1:40	
SPECTRALOG	1415 - 1955	X	X
PHOTON LOG	1491 - 1522	X	
TEMPERATURE LOG	821 - 1382		X
PRESSURE EVALUATION LOG	860 - 2500	1:5000	
DRILL. DATA PRESSURE LOG	860 - 2500	1:5000	
WIRELINE DATA PRESSURE LOG	860 - 2500	1:5000	
TEMPERATURE DATA LOG	860 - 2500	1:5000	
CBL VDL AC	793 - 1429	X	
CBL VDL AC	1250 - 1965	X	
FMT	1517 - 1579		
FMT	1972 - 2446	X	
MUD	863 - 2500		X
VELOCITY	465 - 2495	1:1000	X

(+ Air Gun Well Velocity Survey and Calibr. log data 1 stk)
(+ Synthetic Seismogram, marine, 10 cm/s. 1 stk)
(+ V.S.P., 20 cm/s. 2 stk)
(+ V.S.P., 10 cm/s. 9 stk)

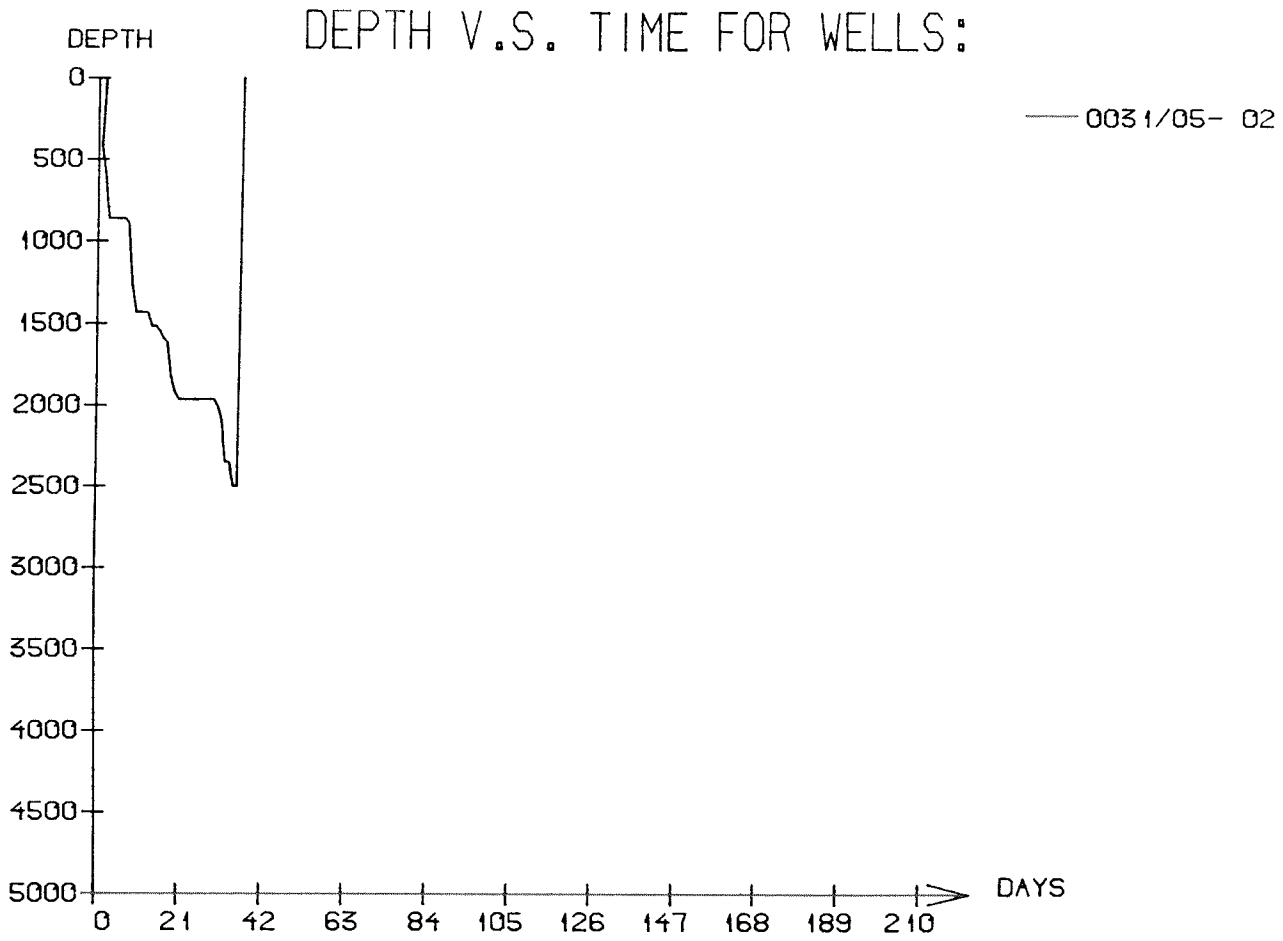
DAILY DRILLING REPORT SYSTEM

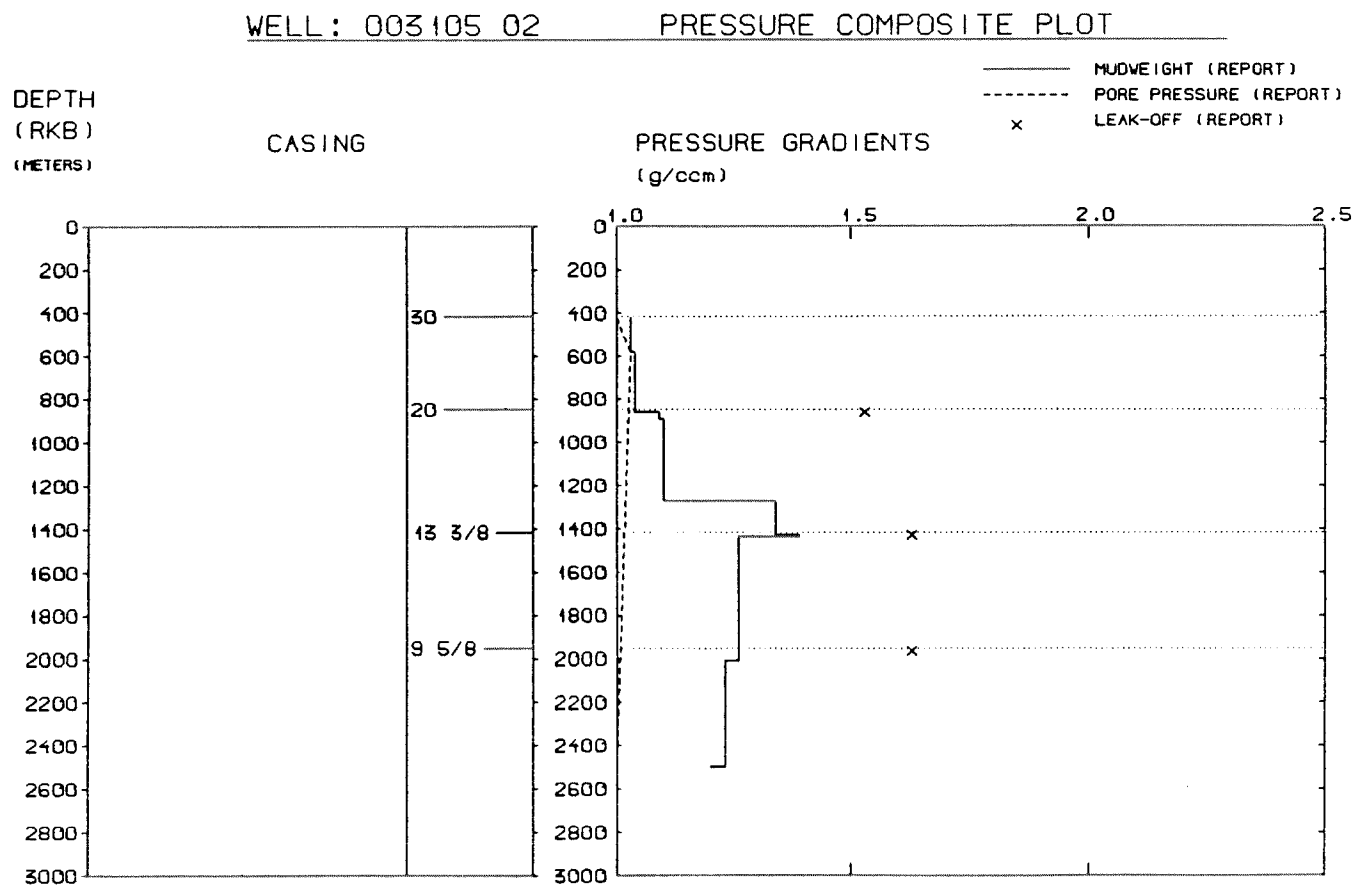
Main operation : 31/05-02



Total : 926,50 HRS

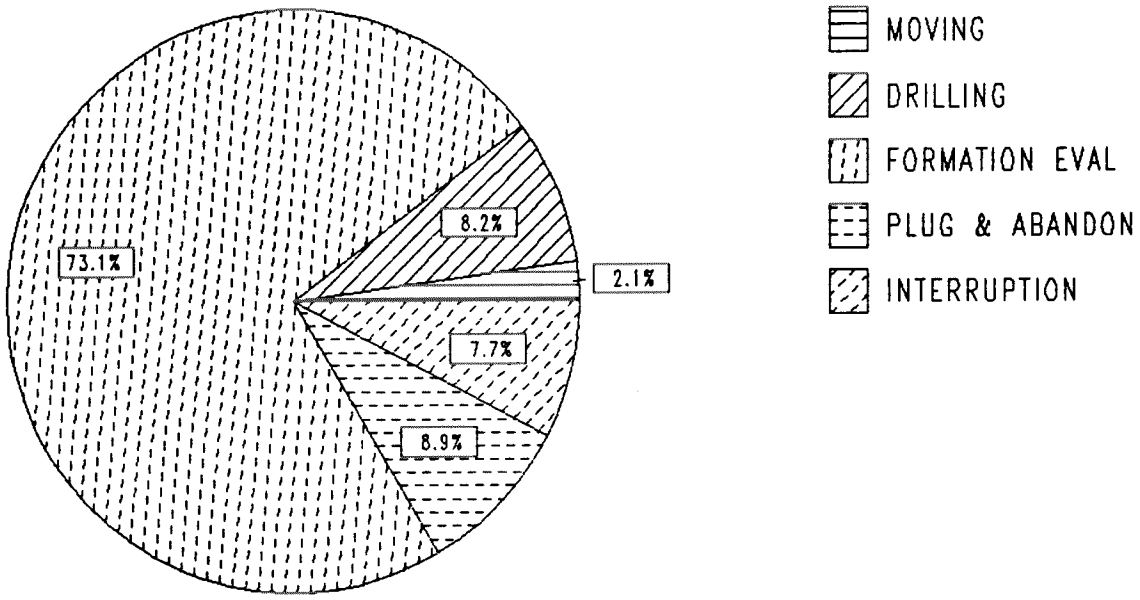
Main operation	Hours	% of total
MOVING	22,00	2,37
DRILLING	579,00	62,49
FORMATION EVAL	179,00	19,32
PLUG & ABANDON	30,50	3,29
INTERRUPTION	116,00	12,52


DEPTH V.S. TIME FOR WELLS:
DEPTH
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
0
21
42
63
84
105
126
147
168
189
210
DAYS
0031/05- 02


WELL: 003105 02 PRESSURE COMPOSITE PLOT
MUDWEIGHT (REPORT)
PORE PRESSURE (REPORT)
LEAK-OFF (REPORT)
DEPTH
(RKB)
(METERS)
CASING
PRESSURE GRADIENTS
(g/ccm)
1.0
1.5
2.0
2.5
30
20
13 3/8
9 5/8

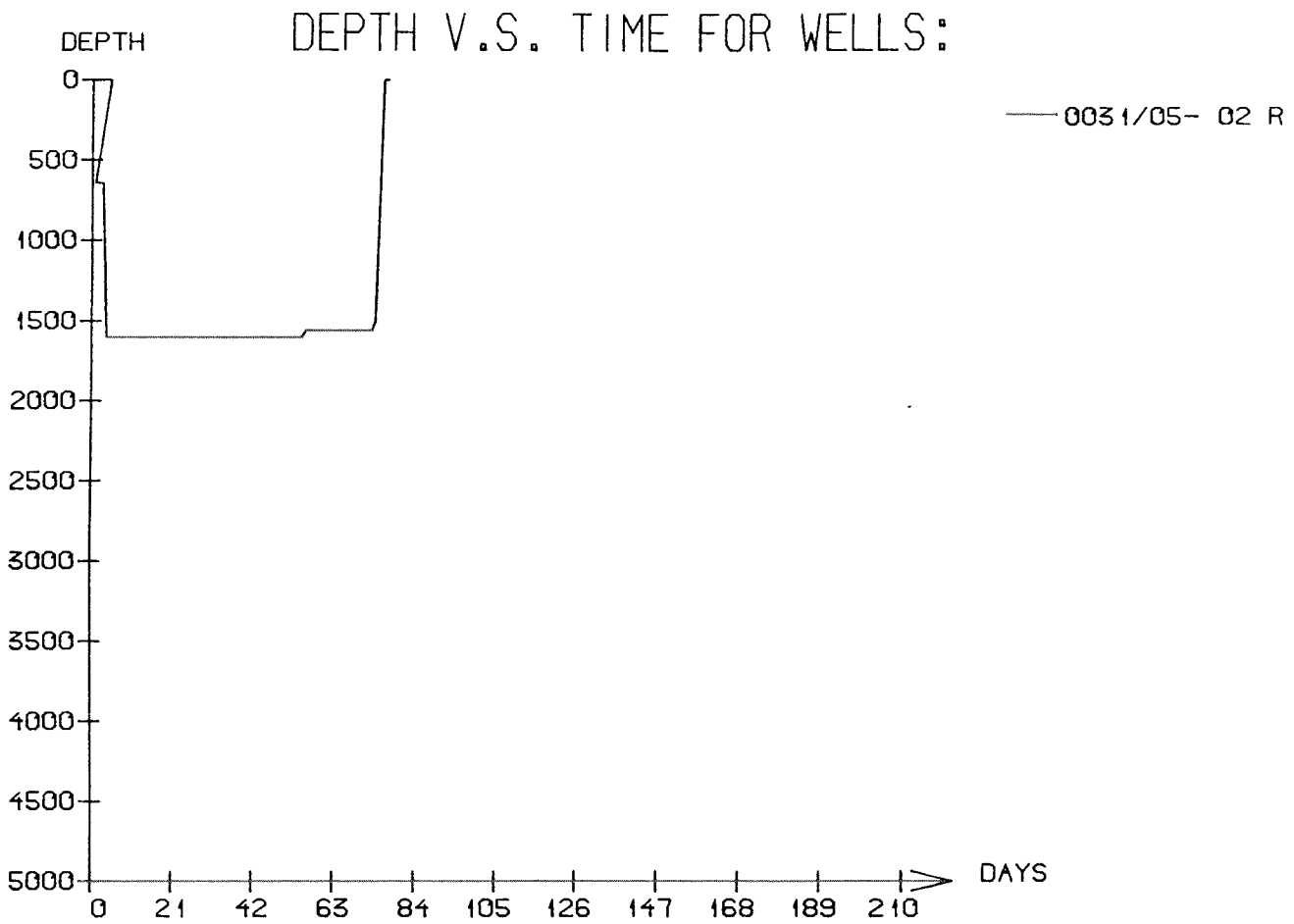
DAILY DRILLING REPORT SYSTEM

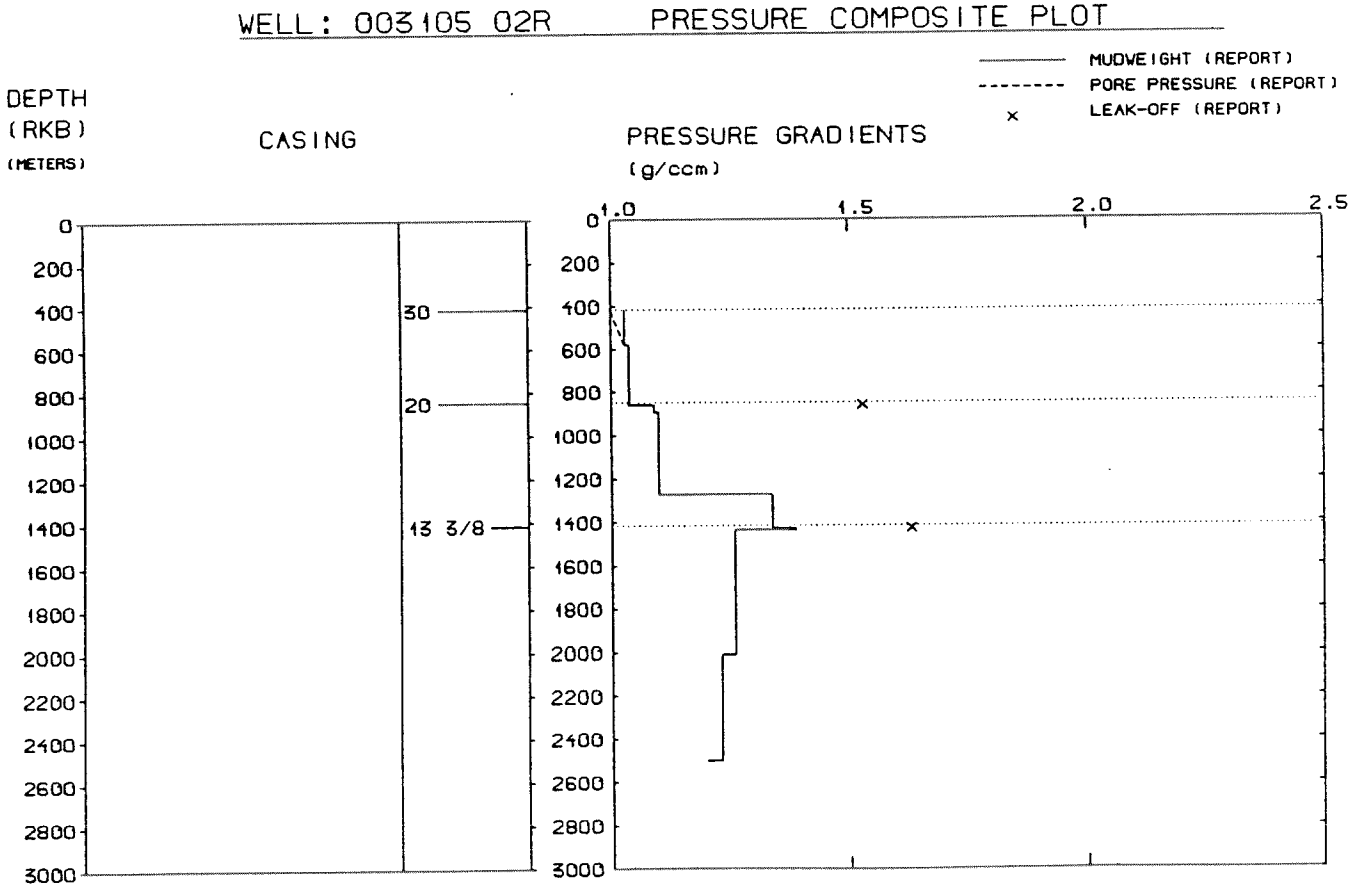
Main operation : 31/05-02 R



Total : 1977,50 HRS

Main operation	Hours	% of total
MOVING	42,50	2,15
DRILLING	162,50	8,22
FORMATION EVAL	1444,50	73,05
PLUG & ABANDON	176,00	8,90
INTERRUPTION	152,00	7,69


DEPTH V.S. TIME FOR WELLS:
DEPTH
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
0
21
42
63
84
105
126
147
168
189
210
DAYS
0031/05- 02 R


WELL: 003105 02R PRESSURE COMPOSITE PLOT
MUDWEIGHT (REPORT)
PORE PRESSURE (REPORT)
LEAK-OFF (REPORT)
DEPTH
(RKB)
(METERS)
CASING
PRESSURE GRADIENTS
(g/ccm)
30
20
13 3/8
1.0
1.5
2.0
2.5
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000

WELL HISTORY - 31/5-2 AND 31/5-2 R

GENERAL:

As well as 31/5-1 the main purpose of the wildcat 31/5-2 was to test the reservoir qualities and the oil/gas column in the southern part of the Troll West area. Hydrocarbons were encountered in the Upper Jurassic Sognefjord Formation.

OPERATIONS:

The well 31/5-2 was spudded 05.10.83 by the semi-submersible rig Treasure Saga, and re-entered 11.06.84 by the same rig. Six cores were cut in the Upper Jurassic sequence.
Some technical problems occured due to setting the seal-assembly on the 9 5/8" casing.
The well was drilled using water based mud.

TESTING:

Three tests were performed in the Sognefjord Formation, two in the oil zone and one in the gas zone.

NOTE:

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

GEOLOGICAL TOPS

WELL: 31/ 5-02 & 31/ 5-02 R

	Depth m (RKB)
Nordland Group	*342.000*
Hordaland Group	*524.000*
Rogaland Group	*1210.000*
Balder Fm	*1210.000*
Sele Fm	*1286.000*
Lista Fm	*1382.000*
Shetland Group	*1432.000*
Cromer Knoll Group	*1450.000*
Viking Group	*1475.000*
Draupne Fm	*1475.000*
Sognefjord Fm	*1516.000*
Upper Heather Fm	*1642.000*
Fensfjord Fm	*1674.000*
Krossfjord Fm	*1826.000*
Lower Heather Fm	*1908.000*
Brent Group	*1957.000*
Ness Fm	*1972.000*
Dunlin Group	*2036.000*
Drake Fm	*2036.000*
Cook Fm	*2176.000*
Amundsen Fm	*2194.000*
Johansen Fm	*2225.000*
Statfjord Fm	*2336.000*
Hegre Group	*2393.000*
TD =	*2500.000*