

Well no :31/6-08 and 31/6-08 R Operator : HYDRO

Coordinates	: 60 33 21.36 N 03 40 39.07 E	UTM coord.	: 6713676 537156
Licence no	: 85	Permit no	: 462
Rig	: TREASURE SEEKER	Rig type	: SEMI-SUB.
Contractor	: WILHELMSSEN OFFSHORE SERVICES		
Bottom hole temperature	: 65 deg.C	Elev. KB	: 25 M
Spud. date	: 85.04.14	Water depth	: 298 M
Re-entry	: 85.07.22		
Compl. date	: 85.05.25	Total depth	: 2138 M
Re-entry	: 85.09.22		
Spud. class	: APPRAISAL	Form. at TD	: JURASSIC
Compl. class	: SUSP. OIL/GAS DISC.	Prod. form	:
Re-entry	: P&A. OIL/GAS DISC.	Re-entry	: JURASSIC
Seisloca	: NH 8202 - 338 SP. 247		

LICENSEES

 9.000000 NORSK HYDRO PRODUKSJON A.S
 6.000000 SAGA PETROLEUM A.S.
 85.000000 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
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CONDUCTOR	30	411.0	36	416.0	
SURF.COND.	20	687.0	26	700.0	1.54
INTERM.	13 3/8	1437.0	17 1/2	1465.0	1.59
INTERM.	9 5/8	1646.0	12 1/4	1660.0	1.57
OPEN HOLE			8 1/2	2138.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	1489.0 - 1503.0	0.0	0.0	UPPER JURASSIC
2	1503.0 - 1512.0	9.0	100.0	UPPER JURASSIC
3	1520.0 - 1530.0	10.0	100.0	UPPER JURASSIC
4	1537.0 - 1551.1	14.1	100.0	UPPER JURASSIC
5	1555.0 - 1566.1	11.1	89.0	UPPER JURASSIC
6	1567.5 - 1586.0	18.5	100.0	UPPER JURASSIC
7	1586.0 - 1604.5	18.5	100.0	UPPER JURASSIC
8	1604.5 - 1623.0	18.5	100.0	UPPER JURASSIC
9	1623.0 - 1641.5	18.5	100.0	U/M JURASSIC
10	1641.5 - 1659.2	18.5	95.6	MIDDLE JURASSIC
11	1663.0 - 1673.0	10.0	100.0	MIDDLE JURASSIC
12	1681.5 - 1700.0	18.5	100.0	MIDDLE JURASSIC

MUD PROPERTIES

Depth below KB meter	Mud weight g/cm ³	Plastic viscosity mPa.s	Mud type
416.000	1.35		WATER BASED
700.000	1.08	10.0	WATER BASED
860.000	1.20	19.0	WATER BASED
946.000	1.16		WATER BASED
1083.000	1.27	18.0	WATER BASED
1171.000	1.24	18.0	WATER BASED
1185.000	1.16		WATER BASED
1221.000	1.24	17.0	WATER BASED
1354.000	1.23	15.0	WATER BASED
1465.000	1.25	18.0	WATER BASED
1482.000	1.16		WATER BASED
1489.000	1.20	10.0	WATER BASED
1512.000	1.16		WATER BASED
1537.000	1.20	25.0	WATER BASED
1562.000	1.16		WATER BASED
1567.000	1.20	49.0	WATER BASED
1570.000	1.16	15.0	WATER BASED
1605.000	1.20	13.0	WATER BASED
1619.000	1.16		WATER BASED
1641.000	1.20	13.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	1537.600 - 1557.600	23.8			
2.0	1522.500 - 1523.100				
3.0	1416.000 - 1418.000				

RECOVERY

Test no.	Oil Sm ³ /d	Gas M Sm ³ /d	Oil grav. g/cm ³	Gas grav. rel. air	GOR m ³ /m ³
1.0		26			
2.0					
3.0					

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	420 - 2137	640
Wet Samples	420 - 2137	640

SHALLOW GAS

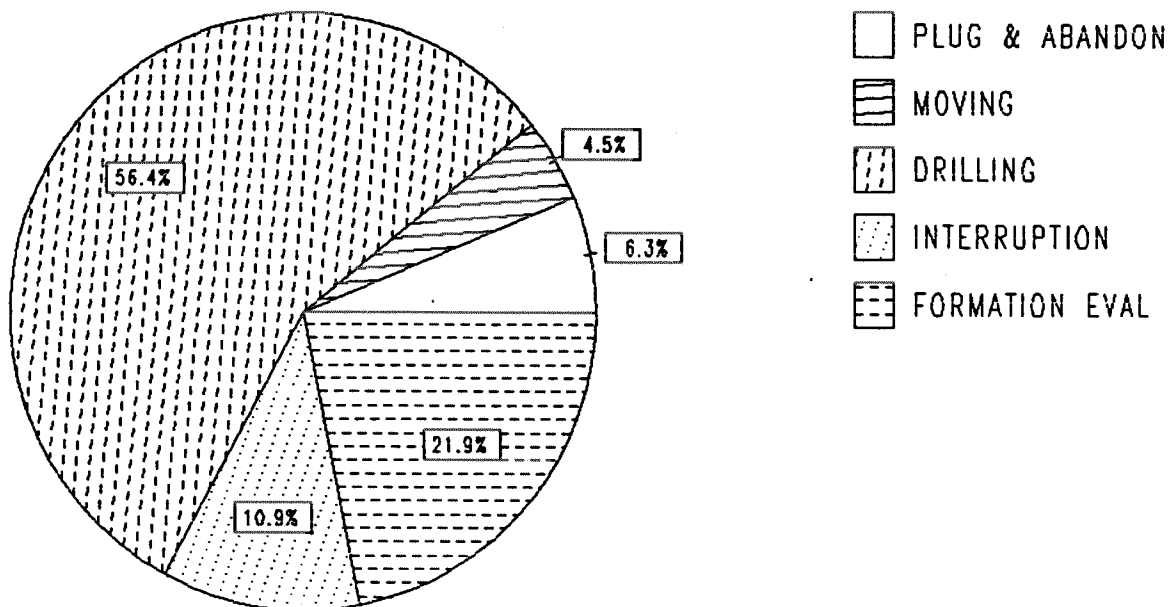
Interval below KB	REMARKS
	NONE

AVAILABLE LOGS 31/6 8

LOG TYPE	INTERVALS	1/200	1/500
ISF LSS GR	325 - 2140	X	X
LDL CNL	687 - 2142	X	X
DLL MSFL	1437 - 1656	X	X
CDM	1100 - 1442	X	
CDM AP	1096 - 1440	X	X
CDM AP/SHDT	1437 - 1660	X	X
CDM AP/SHDT	1647 - 2142	X	X
NGT RATIOS	1437 - 1659	X	
NGT RATIOS	1648 - 2142	X	
RFT HP GAUGE	1488 - 1640		1:1000
RFT STRAIN GAUGE	1488 - 1640		1:1000
CBL VDL	1200 - 1597	X	
MUD	325 - 2138		X
VELOCITY	687 - 2140		1:1000 X
(+ Synthetic Seismogram, Marine, 10 cm/s,			1 stk)
(+ Synthetic Seismogram, 10 cm/s,			2 stk)
(+ VSP, 10 cm/s, display 1-7,			7 stk)

DAILY DRILLING REPORT SYSTEM

Main operation : 31/06-08



Total : 1032 HRS

Main operation	Minutes	Hours	% of total
PLUG & ABANDON	3870	64.50	6.25
MOVING	2790	46.50	4.51
DRILLING	34935	582.25	56.42
INTERRUPTION	6735	112.25	10.88
FORMATION EVAL	13590	226.50	21.95

MAIN OPERATIONS WELL : 31/06-08

MAIN OPERATION: DRILLING

Sub operations	Min	Hrs	% of total
BOP/WELLHEAD EQ	5025	83.75	14.38
CASING	6570	109.50	18.81
OTHER	300	5.00	0.86
DRILL	7620	127.00	21.81
CIRC/COND	1215	20.25	3.48
TRIP	5655	94.25	16.19
BOP ACTIVITIES	2355	39.25	6.74
SURVEY	1320	22.00	3.78
REAM	3165	52.75	9.06
WAIT	1710	28.50	4.89
TOTAL	34935	582.25	

MAIN OPERATION: MOVING

Sub operations	Min	Hrs	% of total
TRANSIT	60	1.00	2.15
SKID	150	2.50	5.38
ANCHOR	2580	43.00	92.47
TOTAL	2790	46.50	

MAIN OPERATION: FORMATION EVAL

Sub operations	Min	Hrs	% of total
LOG	4665	77.75	34.33
CIRC SAMPLES	60	1.00	0.44
TRIP	4665	77.75	34.33
CIRC/COND	780	13.00	5.74
CORE	3420	57.00	25.17
TOTAL	13590	226.50	

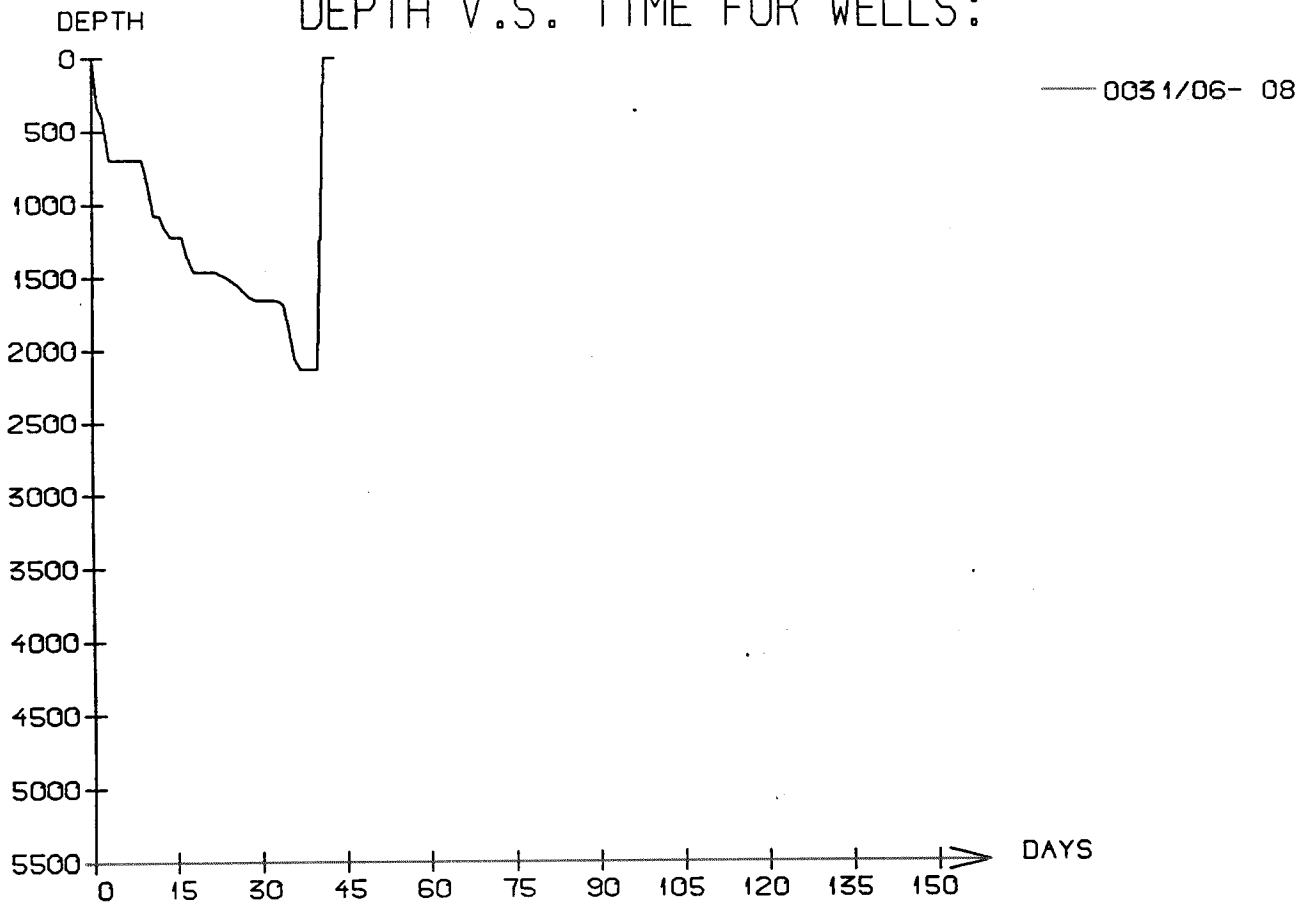
MAIN OPERATION: INTERRUPTION

Sub operations	Min	Hrs	% of total
MAINTAIN/REP	1410	23.50	20.94
WAIT	4410	73.50	65.48
LOST CIRC	645	10.75	9.58
OTHER	240	4.00	3.56
WELL CONTROL	30	0.50	0.45
TOTAL	6735	112.25	

MAIN OPERATION: PLUG & ABANDON

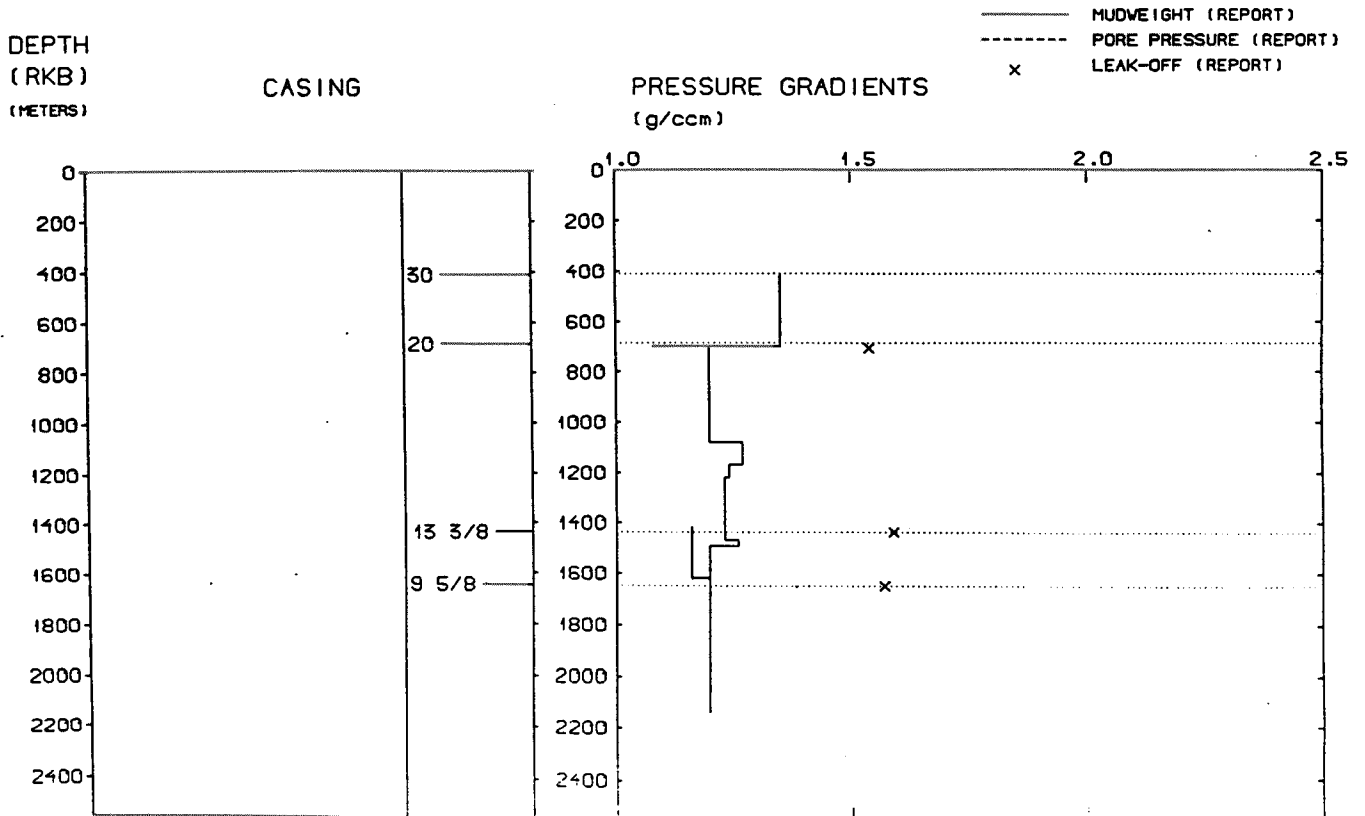
Sub operations	Min	Hrs	% of total
CUT	1380	23.00	35.66
TRIP	1350	22.50	34.88
CIRC/COND	75	1.25	1.94
CEMENT PLUG	375	6.25	9.69
EQUIP RECOVERY	300	5.00	7.75
OTHER	390	6.50	10.08
TOTAL	3870	64.50	

DEPTH V.S. TIME FOR WELLS:



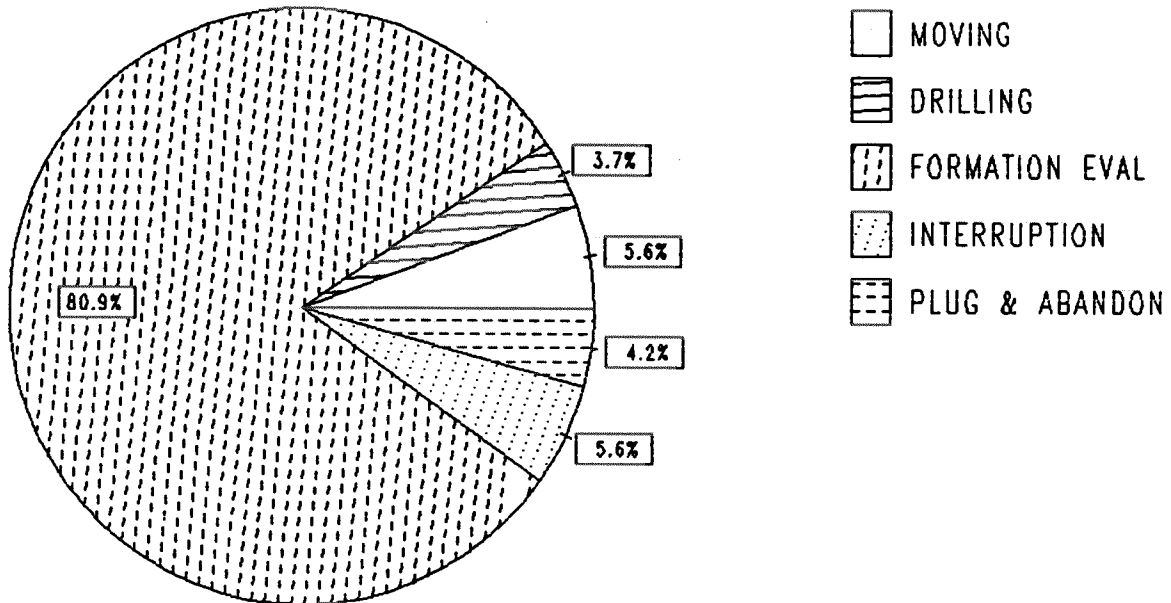
WELL: 003106 08

PRESSURE COMPOSITE PLOT



DAILY DRILLING REPORT SYSTEM

Main operation : 31/06-08 R



Total : 1560 HRS

Main operation	Minutes	Hours	% of total
MOVING	5205	86.75	5.56
DRILLING	3465	57.75	3.70
FORMATION EVAL	75690	1261.50	80.88
INTERRUPTION	5265	87.75	5.63
PLUG & ABANDON	3960	66.00	4.23

MAIN OPERATIONS WELL : 31/06-08 R

MAIN OPERATION: DRILLING

Sub operations	Min	Hrs	% of total
BOP/WELLHEAD EQ	1725	28.75	49.78
BOP ACTIVITIES	330	5.50	9.52
TRIP	690	11.50	19.91
DRILL	255	4.25	7.36
CIRC/COND	120	2.00	3.46
OTHER	345	5.75	9.96
TOTAL	3465	57.75	

MAIN OPERATION: MOVING

Sub operations	Min	Hrs	% of total
TRANSIT	1620	27.00	31.12
ANCHOR	3585	59.75	68.88
TOTAL	5205	86.75	

MAIN OPERATION: FORMATION EVAL

Sub operations	Min	Hrs	% of total
DST	73230	1220.50	96.75
WAIT	2460	41.00	3.25
TOTAL	75690	1261.50	

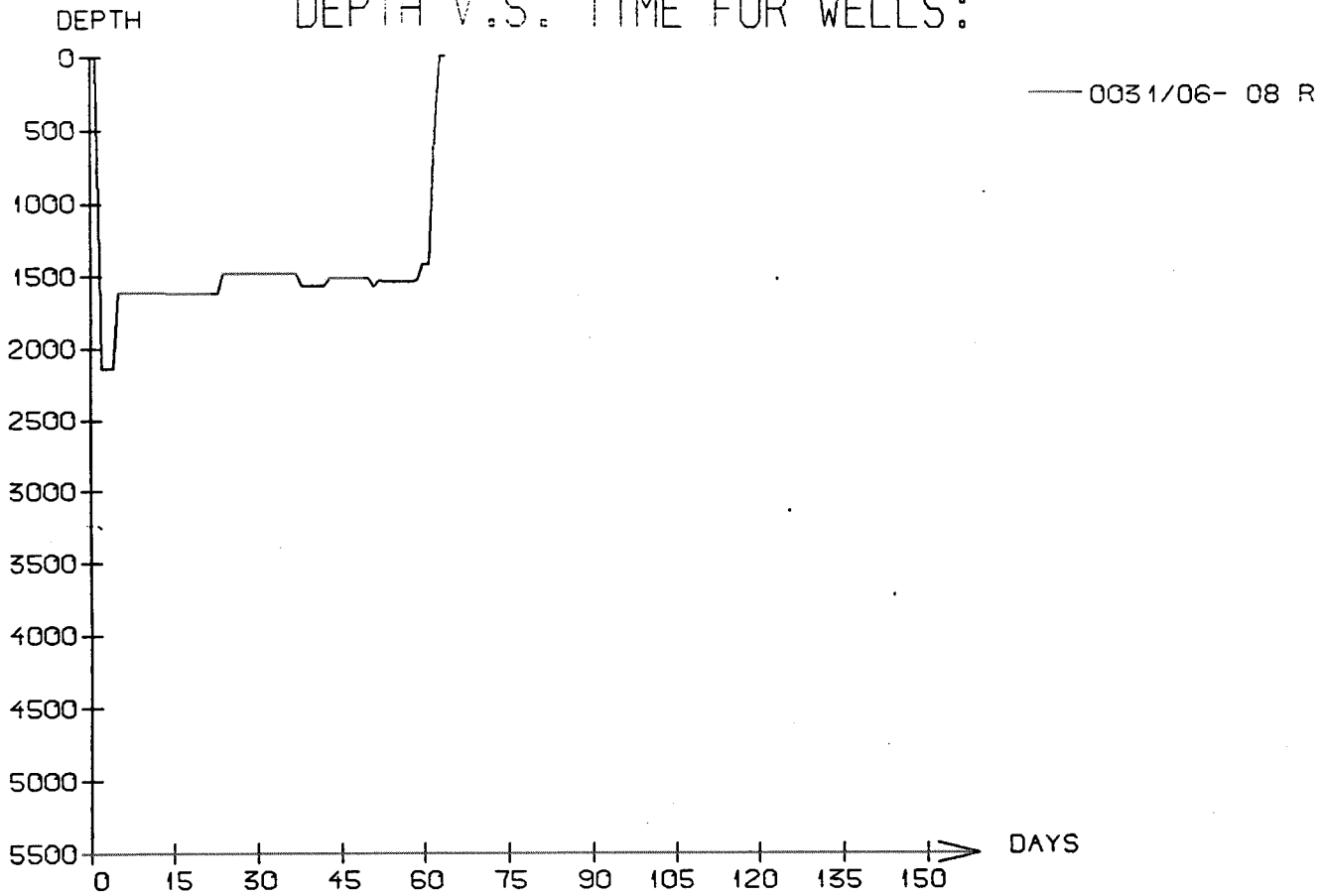
MAIN OPERATION: INTERRUPTION

Sub operations	Min	Hrs	% of total
MAINTAIN/REP	1770	29.50	33.62
WAIT	1395	23.25	26.50
FISH	2010	33.50	38.18
WELL CONTROL	90	1.50	1.71
TOTAL	5265	87.75	

MAIN OPERATION: PLUG & ABANDON

Sub operations	Min	Hrs	% of total
SQUEEZE	150	2.50	3.79
CIRC/COND	120	2.00	3.03
TRIP	360	6.00	9.09
MECHANICAL PLUG	15	0.25	0.38
PERFORATE	630	10.50	15.91
CUT	795	13.25	20.08
EQUIP RECOVERY	1830	30.50	46.21
CEMENT PLUG	60	1.00	1.52
TOTAL	3960	66.00	

DEPTH V.S. TIME FOR WELLS:



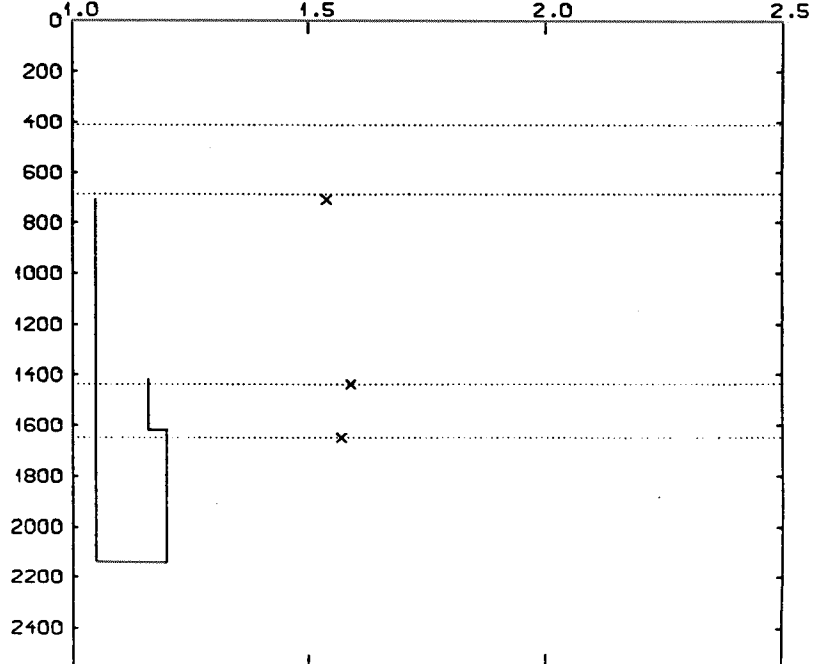
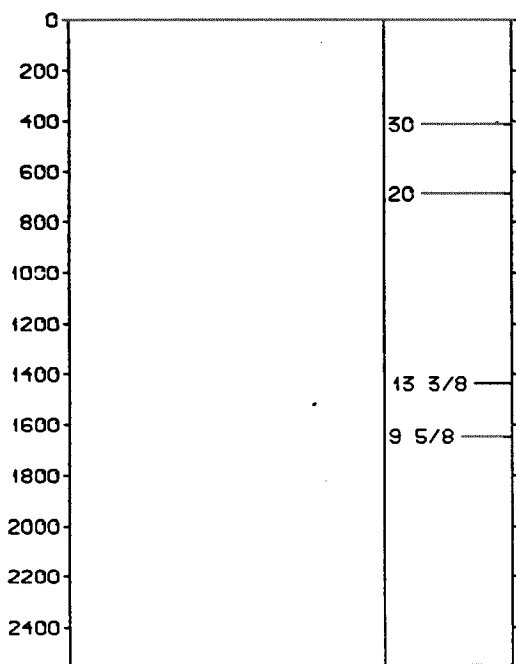
WELL: 003106 08R PRESSURE COMPOSITE PLOT

DEPTH
(RKB)
(METERS)

CASING

PRESSURE GRADIENTS
(g/ccm)

— MUDWEIGHT (REPORT)
 - - - PORE PRESSURE (REPORT)
 x LEAK-OFF (REPORT)



WELL HISTORY 31/6-8 and 31/6-8 R

GENERAL:

Appraisal well 31/6-8 was drilled in the south-western corner of block 31/6.

The main objectives of the well was to determine the lateral extent of the reservoir, to determine the fluid contacts in the Sognefjord Formation and to obtain the best possible seismic correlation within the reservoir from well 31/6-1.

OPERATIONS:

The well was spudded 14 April 1985 by the semi-submersible rig Treasure Seeker.

Drilling the well proceeded without significant problems. The interval down to setting depth for 20" casing was not logged, as this interval was considered covered by logs from well 31/6-7.

Top reservoir, in Sognefjord Formation, came in at 1507 m, gas/oil contact at 1573 m, and oil/water contact at 1577 m.

This leaves a gas column of 66 m and an oil column of 2 m. 12 cored were cut in the interval 1489 - 1700 m.

The well was temporarily suspended 25 May 1985, and subsequently re-entered for testing 20 July 1985.

TESTING:

3 Drill Stem Tests were performed and the results were encouraging. The operator considers the production rate to be the worlds record for an offshore well.

GEOLOGICAL TOPS

WELL: 31/06-08

	<i>Depth m (RKB)</i>
<i>Nordland Group</i>	323,0
<i>Hordaland Group</i>	538,0
<i>Rogaland Group</i>	985,0
<i>Balder Fm</i>	985,0
<i>Sele Fm</i>	1112,0
<i>Lista Fm</i>	1224,0
<i>Våle Fm</i>	1256,0
<i>Shetland Group</i>	1277,0
<i>Cromer Knoll Group</i>	1371,0
<i>Viking Group</i>	1412,0
<i>Draupne Fm</i>	1412,0
<i>Heather Fm</i>	1485,0
<i>Sognefjord Fm</i>	1507,0
<i>Heather Fm</i>	1661,0
<i>Fensfjord Fm</i>	1705,0
<i>Krossfjord Fm</i>	1927,0
<i>Heather Fm</i>	1965,0
<i>Brent Group</i>	1985,0
<i>Ness Fm</i>	1985,0
<i>Etive Fm</i>	2001,0
<i>Dunlin Group</i>	2008,0
<i>Drake Fm</i>	2008,0
<i>Cook Fm</i>	2125,0
<i>TD=</i>	2138,0