

Well no : 6506/12-03

Operator : STATOIL

Coordinates : 65 01 31.09 N
06 53 27.35 E

UTM coord. : 7213112 N
400646 E

Licence no : 94

Permit no : 456

Rig : ROSS ISLE

Rig type : SEMI-SUB.

Contractor : ROSS DRILLING CO. A/S

Bottom hole temperature : 130 deg.C

Elev. KB : 22 M

Spud. date : 85.03.02

Water depth : 307 M

Compl. date : 85.07.17

Total depth : 4360 M

Spud. class : WILDCAT

Form. at TD : E.JURASSIC

Compl. class : P&A. OIL/GAS DISC.

Prod. form : JURASSIC

Seisloca : ST 8403 - 402 A SP. 11123

LICENSEES

10.000000 NORSK AGIP A/S
10.000000 ARCO NORGE A/S
5.000000 NORSK HYDRO PRODUKSJON A.S
15.000000 MOBIL EXPLORATION NORWAY INC.
50.000000 DEN NORSKE STATS OLJESELSKAP A.S
10.000000 TENNECO OIL NORWAY 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
CONDUCTOR	30	401.0	36	404.0	
SURF.COND.	20	940.0	26	955.0	1.65
INTERM.	13 3/8	2240.0	17 1/2	2250.0	1.87
INTERM.	9 5/8	3809.0	12 1/4	3830.0	1.83
LINER	7	4359.0	8 1/2	4360.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	3836.0 - 3845.5	9.5	100.0	MIDDLE JURASSIC
2	3845.5 - 3855.0	9.5	100.0	MIDDLE JURASSIC
3	3855.0 - 3864.2	9.2	100.0	MIDDLE JURASSIC
4	3864.2 - 3884.0	18.4	93.0	MIDDLE JURASSIC
5	3884.0 - 3911.2	27.2	100.0	MIDDLE JURASSIC
6	3911.2 - 3926.0	14.8	100.0	MIDDLE JURASSIC
7	3949.0 - 3977.0	28.0	100.0	MIDDLE JURASSIC
8	3977.0 - 4003.0	26.0	96.3	MIDDLE JURASSIC
9	4004.0 - 4018.0	14.0	100.0	MIDDLE JURASSIC
10	4116.0 - 4144.0	28.0	100.0	LOWER JURASSIC
11	4144.0 - 4170.0	26.0	100.0	LOWER JURASSIC
12	4170.0 - 4197.5	27.5	100.0	LOWER JURASSIC
13	4197.5 - 4221.5	24.0	100.0	LOWER JURASSIC
14	4221.5 - 4249.5	28.0	100.0	LOWER JURASSIC
15	4249.5 - 4268.0	18.5	95.0	LOWER JURASSIC

MUD PROPERTIES

Depth below KB meter	Mud weight g/cm ³	Plastic viscosity mPa.s	Mud type
441.000	1.08	10.0	WATER BASED
660.000	1.10	6.0	WATER BASED
1240.000	1.14		WATER BASED
1320.000	1.18	14.0	WATER BASED
1500.000	1.19	15.0	WATER BASED
1915.000	1.20	12.0	WATER BASED
2043.000	1.25	11.0	WATER BASED
2131.000	1.40	12.0	WATER BASED
2206.000	1.48	17.0	WATER BASED
2250.000	1.57	19.0	WATER BASED
2490.000	1.65	14.0	WATER BASED
3421.000	1.68	21.0	WATER BASED
3711.000	1.70	14.0	WATER BASED
3840.000	1.20	5.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	4222.000 - 4241.000	25.4	1206.6	5826.9	
2.0	4165.000 - 4170.000	25.4	185.6	847.0	
3.0	3960.000 - 3980.000	25.4	1073.2	3624.3	
4.0	3880.500 - 3890.000	28.6	1315.4	5775.1	
5.0	3822.000 - 3836.000	9.5	1060.2	3296.5	
6.0	3162.000 - 3173.000	11.1	2393.0	6337.8	

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	815*	0.377	0.813	0.803	434
2.0	54*	0.068	0.820	0.907	1214
3.0	297*	0.445	0.794	0.755	1499
4.0	788*	0.418	0.820	0.765	516
5.0	92*	0.028	0.830	0.797	304
6.0	329*	0.057	0.803	0.797	173

* - CONDENSATE

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	955 - 4360	525
Wet Samples	950 - 4360	440

SHALLOW GAS

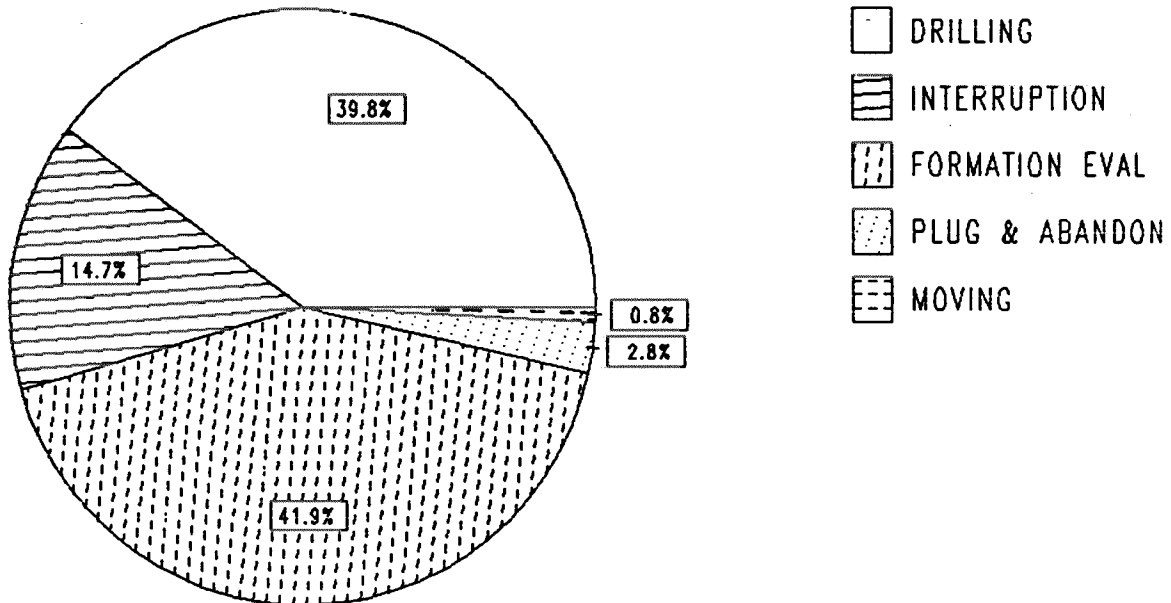
Interval below KB	REMARKS
	NONE

AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500	Div.
ISF LSS MSFL GR	940 - 2248	X	X	
ISF LSS MSFL	2236 - 3830	X	X	
DIL LSS	3810 - 4360	X	X	
LDL	940 - 2249	X	X	
LDL CNL NGS	2236 - 3831	X	X	
LDL CNL NGS	3810 - 4361	X	X	
DLL MSFL SP	3809 - 4357	X	X	
CDM AP/SHDT	2240 - 3828	X	X	
SHDT	2236 - 3830	X		
SHDT	3809 - 4362	X		
RFT	3825 - 3961	X		
RFT HP	3863 - 3863	X		
RFT HP	4303 - 4306	X		
RFT	3961 - 4343	X		
RFT HP	3865 - 4309	X		
RFT	4309 - 4344	X		
NGS	2236 - 3831	X	X	
CBL VDL	347 - 2236	X		
CBL VDL	2390 - 3797	X		
CBL VDL	3659 - 4287	X		
PRESSURE EVALUATION LOG	326 - 4306	1:5000		
MUD	410 - 4360		X	
VELOCITY	940 - 4360		X	
(+ Synthetic Seismogram, Geogram,			4 stk)	
(+ V.S.P., Zero Offset, plot 1-8,			8 stk)	
(+ Composite V.S.P., geogram display, plot 1-2,			2 stk)	

DAILY DRILLING REPORT SYSTEM

Main operation : 6506/12-03



Total : 3336 HRS

Main operation	Minutes	Hours	% of total
DRILLING	79620	1327.00	39.78
INTERRUPTION	29430	490.50	14.70
FORMATION EVAL	83940	1399.00	41.94
PLUG & ABANDON	5610	93.50	2.80
MOVING	1560	26.00	0.78

MAIN OPERATIONS WELL : 6506/12-03

MAIN OPERATION: DRILLING

Sub operations	Min	Hrs	% of total
CASING	11281	188.02	14.17
OTHER	150	2.50	0.19
TRIP	15299	254.98	19.22
DRILL	31320	522.00	39.34
CIRC/COND	4920	82.00	6.18
BOP/WELLHEAD EQ	6900	115.00	8.67
REAM	2190	36.50	2.75
WAIT	4260	71.00	5.35
BOP ACTIVITIES	2820	47.00	3.54
PRESS DETECTION	480	8.00	0.60
TOTAL	79620	1327.00	

MAIN OPERATION: MOVING

Sub operations	Min	Hrs	% of total
ANCHOR	1140	19.00	73.08
TRANSIT	420	7.00	26.92
TOTAL	1560	26.00	

MAIN OPERATION: FORMATION EVAL

Sub operations	Min	Hrs	% of total
LOG	8880	148.00	10.58
CIRC SAMPLES	540	9.00	0.64
CORE	7020	117.00	8.36
TRIP	12900	215.00	15.37
CIRC/COND	660	11.00	0.79
RFT/FIT	1950	32.50	2.32
DST	51990	866.50	61.94
TOTAL	83940	1399.00	

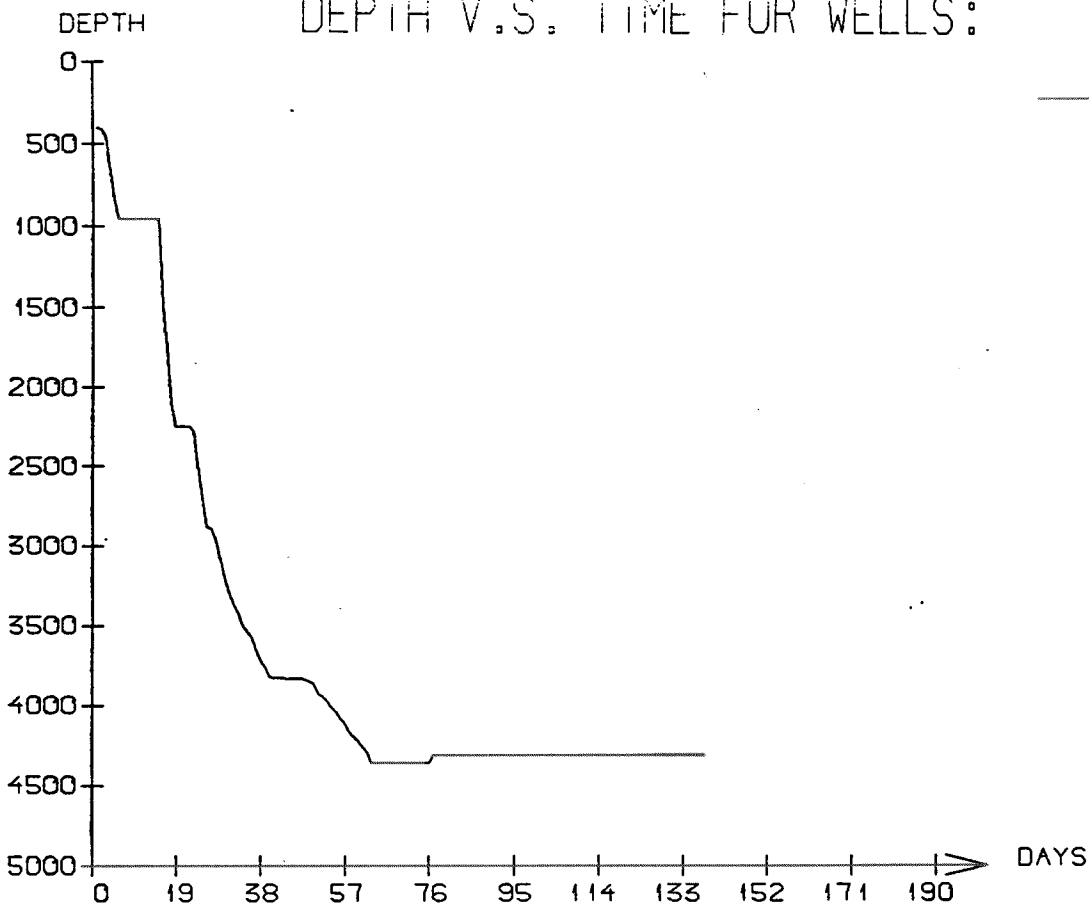
MAIN OPERATION: INTERRUPTION

Sub operations	Min	Hrs	% of total
OTHER	22590	376.50	76.76
MAINTAIN/REP	5040	84.00	17.13
WAIT	630	10.50	2.14
FISH	1170	19.50	3.98
TOTAL	29430	490.50	

MAIN OPERATION: PLUG & ABANDON

Sub operations	Min	Hrs	% of total
PERFORATE	240	4.00	4.28
SQUEEZE	540	9.00	9.63
MECHANICAL PLUG	540	9.00	9.63
TRIP	1560	26.00	27.81
CUT	540	9.00	9.63
EQUIP RECOVERY	1620	27.00	28.88
CIRC/COND	300	5.00	5.35
CEMENT PLUG	210	3.50	3.74
OTHER	60	1.00	1.07
TOTAL	5610	93.50	

DEPTH V.S. TIME FOR WELLS:



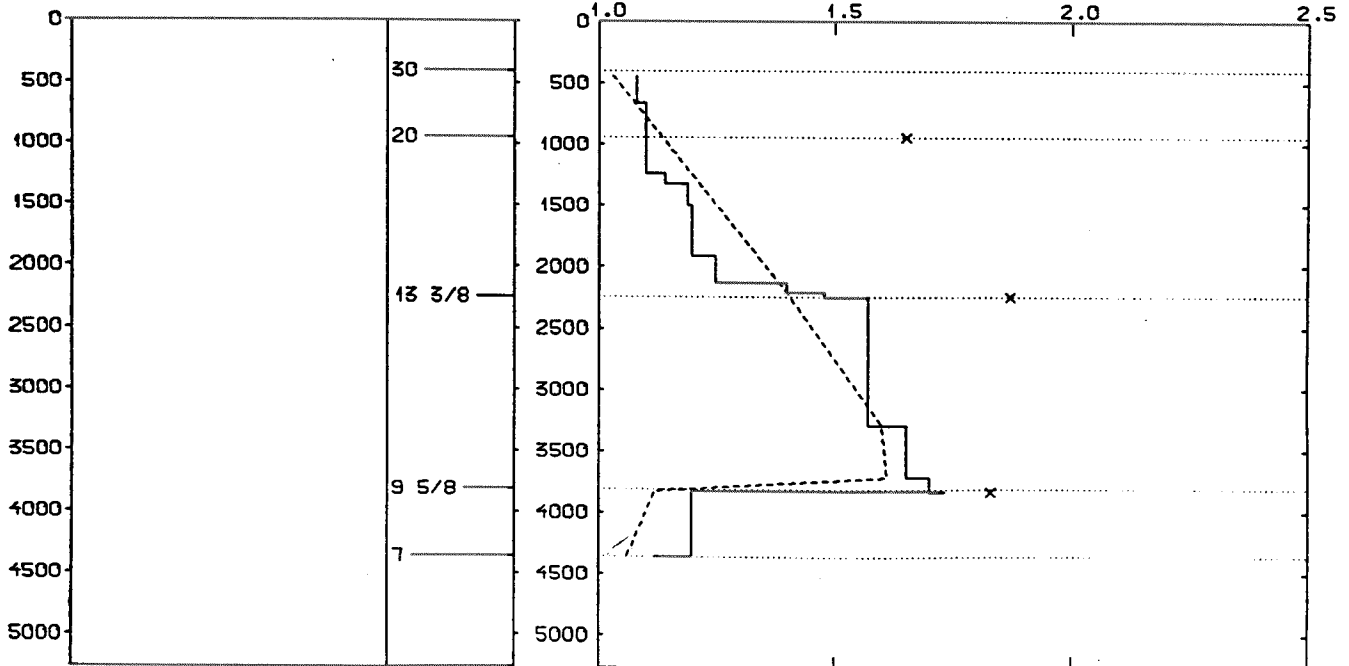
WELL: 650612 03 PRESSURE COMPOSITE PLOT

DEPTH
(RKB)
(METERS)

CASING

PRESSURE GRADIENTS
(g/ccm)

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



Well History 6506/12-3

General:

Wildcat well 6506/12-3 was a replacement well for 6506/12-2 X abandoned at T.D. 955 m RKB due to technical problems.

The new well was designed to test the hydrocarbon potential of the Beta structure in the southeastern part of the block.

The main object was the Middle Jurassic Sst, and secondary targets were possible Cretaceous sands, Lower Jurassic Sst and sandstones within the Coal Beds.

Operations:

Wildcat well 6506/12-3 was spudded 2 March 1985 by Ross Drilling Co A/S semi-submersibel rig Ross Isle, and completed 17 July 1985, at a depth of 4360 m in rocks of Lower Jurassic age, whereby it is satisfying the licence commitment.

Hydrocarbons were encountered both in Middle Jurassic- and Lower Jurassic Sst. Cretaceous Sst at the top of the Finnvær Group were also hydrocarbon bearing.

Top Middle Jura (Tomma fm) came in at 3822 m RKB, 80 m above the prognosis. Cores were cut in the intervals 3836- to 3926 m RKB, and 3949- to 4018 m RKB. Lower Jurassic Sst (Aldra Fm) came in at 4146 m RKB, and was cored between 4116- to 4269 m RKB. A total of 15 cores were cut. Hydrocarbon/water contact at 4216 m RKB. 242 m of hydrocarbon bearing sands are proven.

Plugged and abandoned as an oil/ condensate/ gas discovery.

Testing:

Six DST tests were performed:

- | | | |
|-------------------|-------------|------------------------------------|
| 1 Aldra Formation | 4222-4241 m | Gas/condensate. |
| 2 Aldra Formation | 4165-4170 m | Gas/condensate. |
| 3 Lower Tomma Fm. | 3960-3980 m | Gas/condensate. |
| 4 Upper Tomma Fm. | 3880-3890 m | Oil/Gas/condensate. |
| 5 Upper Tomma Fm. | 3822-3836 m | Oil/Gas/condensate. |
| 6 Finnvær Fm. | 3162-3173 m | Oil W/ass.gas and formation water. |

GEOLOGICAL TOPS

WELL: 6506/12-03

	<i>Depth m (RKB)</i>
<i>Nordland Group</i>	323,0
<i>Naust Fm</i>	323,0
<i>Kai Fm</i>	1388,0
<i>Hordaland Group</i>	1982,0
<i>Brygge Fm</i>	1982,0
<i>Rogaland Group</i>	2214,0
<i>Tare Fm</i>	2214,0
<i>Tang Fm</i>	2278,0
<i>Shetland Group</i>	2336,0
<i>Cromer Knoll Group</i>	3146,0
<i>Lysing Fm</i>	3146,0
<i>Lange Fm</i>	3175,0
<i>Viking Group</i>	3709,0
<i>Spekk Fm</i>	3709,0
<i>Melke Fm</i>	3720,0
<i>Fangst Group</i>	3822,0
<i>Garn Fm</i>	3822,0
<i>Not Fm</i>	3908,0
<i>Ile Fm</i>	3947,0
<i>Båt Group</i>	3997,0
<i>Ror Fm</i>	3997,0
<i>Tilje Fm</i>	4147,0
<i>TD=</i>	4360,0