

Well no : 6507/07-05

Operator : CONOCO

Coordinates	: 65 21 30.27 N 07 17 35.08 E	UTM coord.	: 7249656 N 420590 E
Licence no	: 95	Permit no	: 500
Rig	: NORTRYM	Rig type	: SEMI-SUB.
Contractor	: GOLAR-NOR OFFSHORE A/S		
Bottom hole temperature	: deg.C	Elev. KB	: 25 M
Spud. date	: 86.01.16	Water depth	: 332 M
Compl. date	: 86.03.06	Total depth	: 2660 M
Spud. class	: APPRAISAL	Form. at TD	: E.JURASSIC
Compl. class	: P&A. OIL/GAS DISC.	Prod. form	: M.JURASSIC
Seisloca	: CN 8502 - 599 SP. 225		

## LICENSEES

-----

10.000000	ARCO NORGE A/S
30.000000	NORSKE CONOCO A/S
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 <sup>3</sup>
-----	-----	-----	-----	-----	-----
CONDUCTOR	30	455.0	36	455.0	.
INTERM.	20	1033.0	26	1040.0	1.52
INTERM.	13 3/8	2189.0	17 1/2	2201.0	1.79
INTERM.	13 3/8	2228.0	17 1/2	2255.0	1.79
INTERM.	13 3/8	2228.0	17 1/2	2255.0	1.79
SURF.COND.	20	10033.0	26	1040.0	1.52

## CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
-----	-----	-----	-----	-----
1	2255.0 - 2282.5	27.5	100.0	
2	2282.5 - 2308.5	26.0	100.0	UPPER CRETACEOUS
3	2308.5 - 2336.0	27.5	100.0	UPPER JURASSIC
4	2336.0 - 2349.6	13.6	100.0	MIDDLE JURASSIC
5	2362.0 - 2385.5	13.5	100.0	MIDDLE JURASSIC
6	2390.0 - 2407.7	17.7	100.0	MIDDLE JURASSIC
7	2411.0 - 2439.0	27.9	99.6	LOWER JURASSIC
8	2439.0 - 2467.0	27.7	98.9	LOWER JURASSIC
9	2467.0 - 2480.7	13.7	100.0	LOWER JURASSIC
10	2482.0 - 2497.6	15.6	100.0	LOWER JURASSIC
11	2501.0 - 2509.0	8.0	100.0	LOWER JURASSIC
12	2512.0 - 2533.7	21.6	93.9	LOWER JURASSIC
13	2538.0 - 2553.1	15.1	100.0	LOWER JURASSIC
14	2556.0 - 2578.7	22.7	100.0	LOWER JURASSIC
15	2581.5 - 2591.1	9.6	100.0	LOWER JURASSIC
16	2596.5 - 2623.9	27.4	100.0	LOWER JURASSIC
17	2625.0 - 2644.5	19.5	100.0	LOWER JURASSIC

## CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery M	%	Series
17	2625.0 - 2644.5	19.5	100.0	LOWER JURASSIC

### MUD PROPERTIES

Depth below KB meter	Mud weigh g/cm <sup>3</sup>	Viscosity	Mud type
426.000	1.03	0.0	WATER BASED
1794.000	1.38	0.0	WATER BASED
1905.000	1.39	0.0	WATER BASED
2075.000	1.38	108.0	WATER BASED
2098.000	1.34	0.0	WATER BASED
2248.000	1.42	0.0	WATER BASED
2255.000	1.21	0.0	WATER BASED
2282.500	1.20	0.0	WATER BASED
2308.500	1.21	0.0	WATER BASED
2411.000	1.22	0.0	WATER BASED
2451.000	1.02	0.0	WATER BASED
2512.000	1.20	0.0	WATER BASED
2538.000	1.02	0.0	WATER BASED
2660.000	1.20	108.0	WATER BASED

### DRILL STEM TEST

#### INTERVALS AND PRESSURES

Test no	interval meter	Choke size	Pressure (PSI)		
			WHP	BTHP	FFP
1.0	2417.000 - 2424.000	35.9	647.7	3643.8	3342.2
	Test temperature: 85.7 °C				
2.0	2355.000 - 2375.000	35.9	1162.7	3598.8	3495.5
	Test temperature: 79.8 °C				

#### RECOVERY

Test no.	Oil Sm <sup>3</sup> /d	Gas Sm <sup>3</sup> /d	Oil grav. g/cm <sup>3</sup>	Gas grav. rel. air	GOR m <sup>3</sup> /m <sup>3</sup>
1.0	774	52	0.890	0.650	67
2.0	953	85	0.868	0.684	89

### DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	1050-2228	200
Wet Samples	1050-2660	210

# SHALLOW GAS

Interval  
below KB

REMARKS

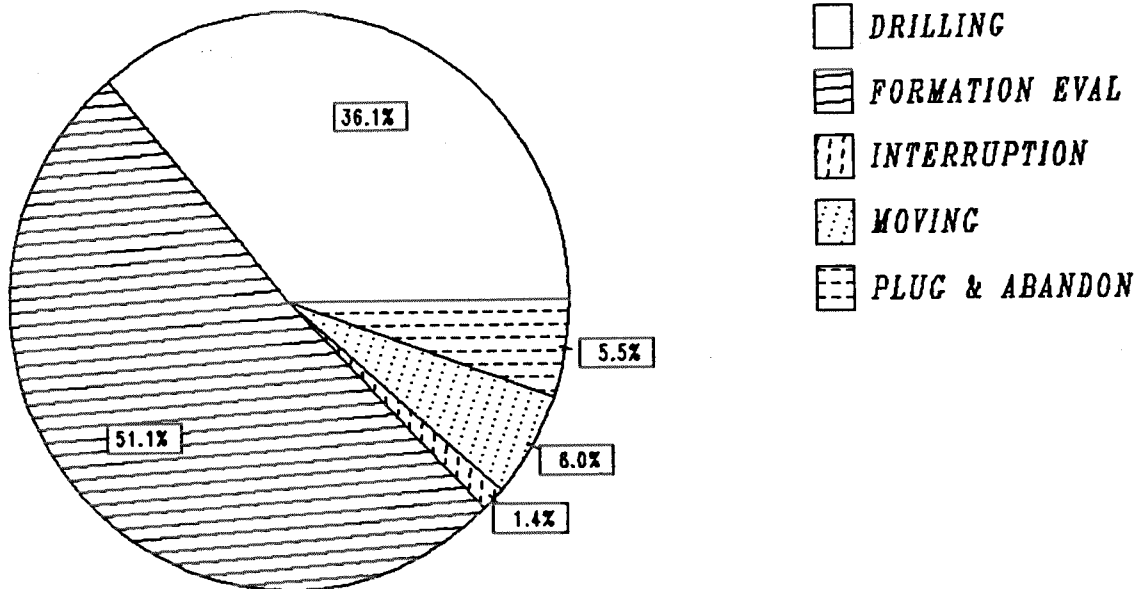
## AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500	Div.
ISF SLS MSFL GR	1032.500 - 2232.000	X	X	
LDL CNL GR	1032.500 - 2233.500	X	X	
LDL CNL GR	2228.000 - 2516.000	X	X	
LDL CNL NGL	2228.000 - 2659.000	X	X	
DIL GR SP	2228.000 - 2516.000	X	X	
DIL SLS GR SP	2228.000 - 2658.000	X	X	
DLL MSFL GR SP	2228.000 - 2655.000	X	X	
CDM AP	2228.000 - 2658.000	X	X	
CDM AP/SHDT	2230.000 - 2658.000	X	X	
SHDT HOLE GEOMETRY	2228.000 - 2658.000	X		
SHDT FAST CHANNEL	2228.000 - 2658.000	X		
RFT STRAIN GAUGE	2358.000 - 2367.000	X		1:100
RFT HP GAUGE	2358.000 - 2637.000	X		1:100
NGT RATIOS	2228.000 - 2659.000	X		X
NGT	2228.000 - 2654.000	X		
CBL VDL GR CCL	2125.000 - 2530.000	X		
CBL VDL GR CCL	2125.000 - 2622.000	X		
ROP DXC AXP SWOB IROP	1040.000 - 2248.000	X		
ROP DXC AXP SWOB IROP	2200.000 - 2660.000	X		
MUD	2200.000 - 2660.000			X
VELOCITY LOG	1036.000 - 2654.000	1:1000	X	

(Airgun well velocity survey and calibrated log 1 stk.)  
 (Display of well velocity survey records 1&2 2 stk.)  
 (Synthetic seismogram, marine, 10 cm/s 5 stk.)  
 (Synthetic seismogram, 1000-2650m 1 stk.)  
 (VSP. Single bolt air gun. 10 cm/s 11 stk.)

# DAILY DRILLING REPORT SYSTEM

Main operations for well : 6507/07 -05



Total : 1248.00 hours

Main operation	Minutes	Hours	% of total
DRILLING	27000	450.00	36.06
FORMATION EVAL	38250	637.50	51.08
INTERRUPTION	1080	18.00	1.44
MOVING	4470	74.50	5.97
PLUG & ABANDON	4080	68.00	5.45

MAIN OPERATIONS FOR WELL : 6507 / 07 - 05

MAIN OPERATION : DRILLING

Sub operations	Minutes	Hrs	% of total
BOP ACTIVITIES	1170	19.50	4.33
BOP/WELLHEAD EQ	1800	30.00	6.67
CASING	5400	90.00	20.00
CIRC/COND	1080	18.00	4.00
DRILL	9240	154.00	34.22
HOLE OPEN	900	15.00	3.33
REAM	270	4.50	1.00
SURVEY	270	4.50	1.00
TRIP	6810	113.50	25.22
WAIT	60	1.00	0.22
<b>Total</b>	<b>27000</b>	<b>450.00</b>	<b>100.00</b>

MAIN OPERATION : FORMATION EVAL

Sub operations	Minutes	Hrs	% of total
CIRC/COND	540	9.00	1.41
CORE	12270	204.50	32.08
DST	13410	223.50	35.06
LOG	4140	69.00	10.82
OTHER	630	10.50	1.65
RFT/FIT	30	0.50	0.08
TRIP	7230	120.50	18.90
<b>Total</b>	<b>38250</b>	<b>637.50</b>	<b>100.00</b>

MAIN OPERATION : INTERRUPTION

Sub operations	Minutes	Hrs	% of total
MAINTAIN/REP	1080	18.00	100.00
<b>Total</b>	<b>1080</b>	<b>18.00</b>	<b>100.00</b>

MAIN OPERATION : MOVING

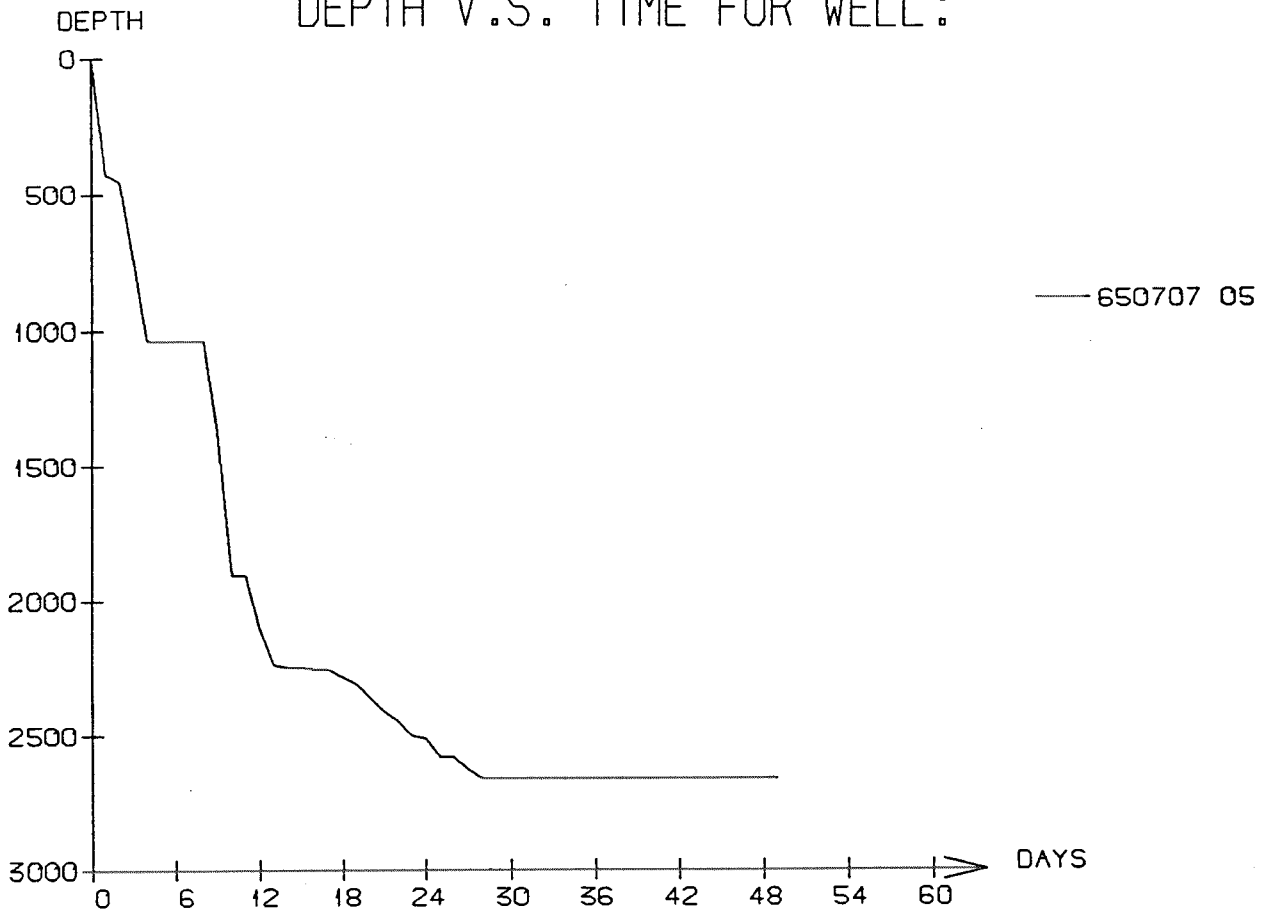
Sub operations	Minutes	Hrs	% of total
ANCHOR	1470	24.50	32.89
POSITION	3000	50.00	67.11
<b>Total</b>	<b>4470</b>	<b>74.50</b>	<b>100.00</b>

MAIN OPERATION : PLUG & ABANDON

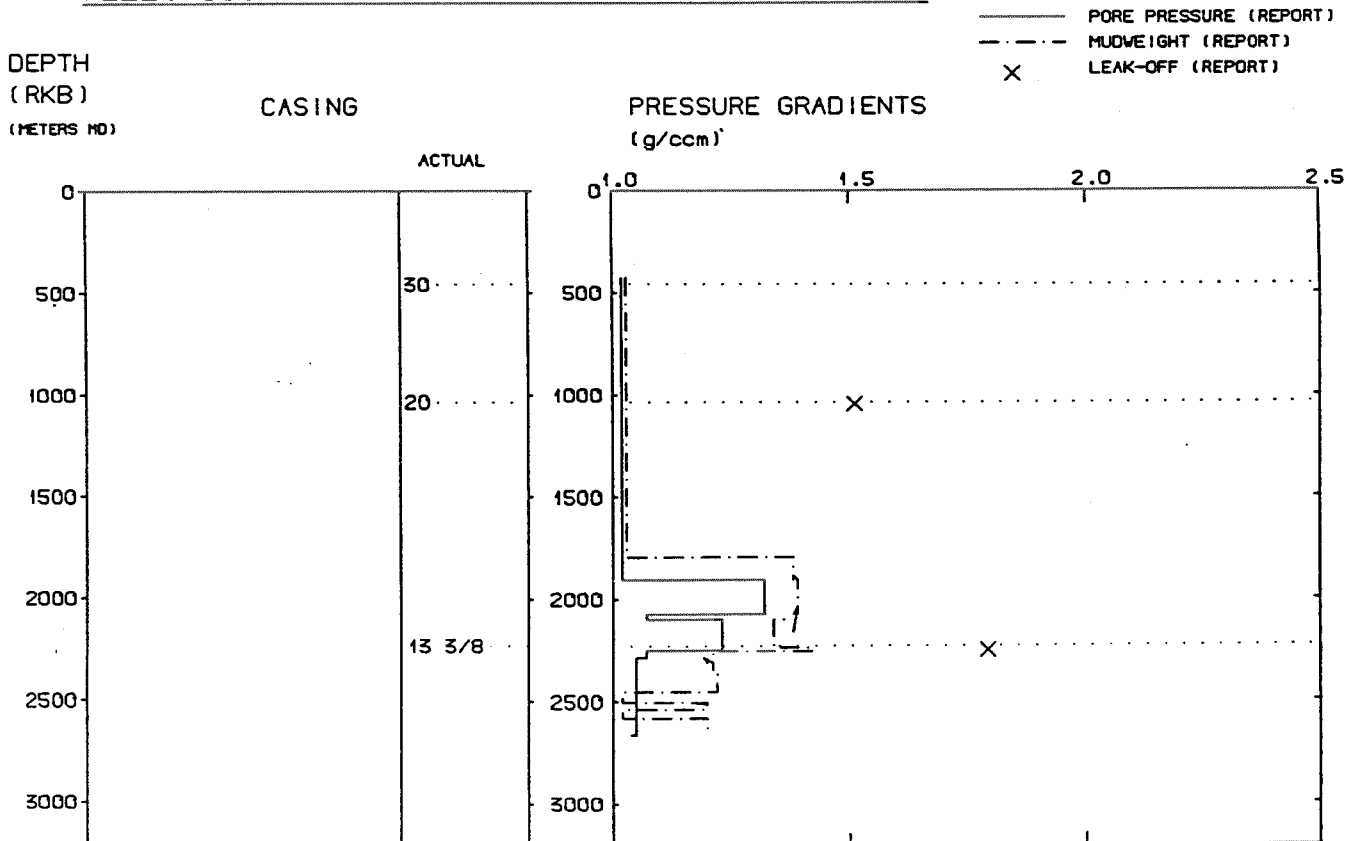
Sub operations	Minutes	Hrs	% of total
CEMENT PLUG	570	9.50	13.97
CIRC/COND	150	2.50	3.68
CUT	450	7.50	11.03
EQUIP RECOVERY	1350	22.50	33.09
OTHER	300	5.00	7.35
PERFORATE	210	3.50	5.15
SQUEEZE	90	1.50	2.21
TRIP	960	16.00	23.53
<b>Total</b>	<b>4080</b>	<b>68.00</b>	<b>100.00</b>

Total time used 1248.00 hrs

# DEPTH V.S. TIME FOR WELL :



## WELL : 650707 05      PRESSURE COMPOSITE PLOT



## Well History 6507/7-5.

### GENERAL:

Well 6507/7-5 was designed to drill a fault wedge formed by Late Jurassic/Early Cretaceous tensional faulting. The prospect is situated on the western flank of a series of NNW-SSE trending fault systems, and straddles two structural features in the Haltenbanken area, Trøndelag Platform and Vøring Basin.

Main objective of the well was to test Middle-Lower Jurassic sands, Fangst Group lithologies, in a heavily eroded downthrown fault block located NNW of the 6507/7-2 well, at a prognosed depth of 2308 m.

Secondary prospect was the Båt Group at an expected depth of 2384 m. Based on site-survey, possible shallow gas would appear at following levels: 512-, 570-, 618-, 746-, 798 m RKB respectively. Prognosed TD was 2675 m.

### OPERATIONS:

Appraisal well 6507/7-5 was spudded 16 January 1986 by Golar-Nor Offshore A/S semi-submersible rig Nortrym, and completed 6 March 1986 at a depth of 2660 m RKB in Early Jurassic rocks. No shallow gas was recorded during drilling. Two drillbreaks were experienced.

Coring commenced at 2255 m RKB, and 17 cores were cut in the interval 2255- 2644,5 m RKB. Analysis of cores and logs indicated good to excellent porosity and permeability with shows. Below 2422 m RKB there were no shows. Fangst Group came in at 2353 m RKB and Båt Group at 2424 m RKB. OWC was not encountered, but 71 m of oil-bearing sands were recorded. The Early Jurassic Tilje Fm was dry as expected. The well was plugged and abandoned as an oil and gas discovery.

### TESTING:

Two DST-tests were performed in this well, both of them tested oil-bearing sands from the Fangst Group.

# GEOLOGICAL TOPS

WELL: 6507/7-5

	Depth m (RKB)
<i>Nordland Group</i>	450,0
<i>Naust Fm</i>	450,0
<i>Kai Fm</i>	1481,0
<i>Hordaland Group</i>	1903,5
<i>Brygge Fm</i>	1903,5
<i>Rogaland Group</i>	1997,5
<i>Tare Fm</i>	1997,5
<i>Tang Fm</i>	2025,0
<i>Shetland Group</i>	2086,0
<i>Viking Group</i>	2309,8
<i>Spekk Fm</i>	2309,8
<i>Melke Fm</i>	2316,0
<i>Fangst Group</i>	2353,0
<i>Garn Fm</i>	2353,0
<i>Båt Group</i>	2424,0
<i>Ror Fm</i>	2424,0
<i>Tilje Fm</i>	2473,5
<i>TD:</i>	2660,0