

Well no : 6507/11-04

Operator : SAGA

Coordinates : 65 08 11.28 N  
07 26 3.45 E UTM coord. : 7224755 N  
426545 E

Licence no : 62 Permit no : 547

Rig : TREASURE SAGA Rig type : SEMI-SUB.

Contractor : WILHELMSSEN OFFSHORE SERVICES

Bottom hole temperature : deg.C Elev. KB : 26 M

Spud. date : 87.05.16 Water depth : 287 M

Compl. date : 87.06.22 Total depth : 3045 M

Spud. class : WILDCAT Form. at TD : E.JURASSIC

Compl. class : P&amp;A. DRY HOLE Prod. form :

Seisloca : 713 - 469 SP. 415

## LICENSEES

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10.000000 ARCO NORGE A/S  
5.000000 NORSK HYDRO PRODUKSJON A.S  
10.000000 SAGA PETROLEUM A.S.  
25.000000 A/S NORSKE SHELL  
50.000000 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
CONDUCTOR	30	436.0	36	444.0	.
SURF.COND.	20	802.0	26	817.0	1.49
INTERM.	13 3/8	1489.0	17 1/2	1506.0	1.70
INTERM.	9 5/8	2503.0	12 1/4	2518.0	1.80

## CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	2564.0 - 2591.8	26.8	100.0	MIDDLE JURASSIC
2	2685.0 - 2713.0	28.0	100.0	

## MUD PROPERTIES

Depth below KB meter	Mud weight g/cm3	Viscosity	Mud type
817.000	1.13	10.0	WATER BASED
1063.000	1.10	19.0	WATER BASED
1281.000	1.11	14.0	WATER BASED
1506.000	1.14	15.0	WATER BASED
1740.000	1.25	17.0	WATER BASED
1929.000	1.35	23.0	WATER BASED
2179.000	1.60	30.0	WATER BASED
2518.000	1.64	25.0	WATER BASED
2518.000	1.66	21.0	WATER BASED

2518.000	1.69	26.0	WATER BASED
2518.000	1.64	20.0	WATER BASED
2518.000	1.66	22.0	WATER BASED
2655.000	1.30	16.0	WATER BASED
2713.000	1.31	14.0	WATER BASED
3045.000	1.30	17.0	WATER BASED

### DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	650-3044	210
Wet Samples	450-3044	210

### SHALLOW GAS

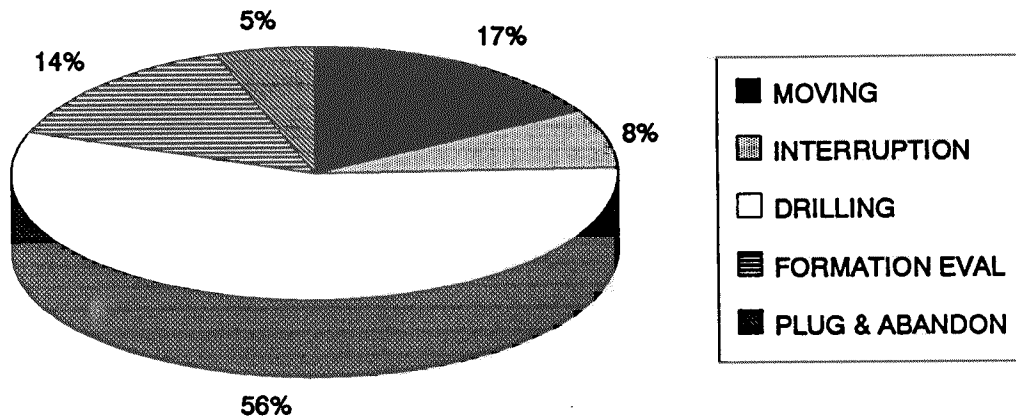
Interval below KB	REMARKS
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### AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500	Div.
DIFL LS BHC AC GR	1489.000 - 2389.000	X	X	
DIFL LS BHC AC GR	2336.000 - 2515.000	X	X	
DIFL LS BHC AC GR	2500.000 - 3041.800	X	X	
CDL GR	1489.000 - 2370.000	X	X	
CDL CNL GR	2500.000 - 3041.000	X	X	
SHDT	2513.000 - 3040.000	X		
SHDT/SPECTRALOG	2500.000 - 3036.000	X		X
CDM AP/PRODIP	2513.000 - 3039.600	X		
CDM AP/SHDT 4-ARM	2513.000 - 3039.600	X		X
FMT HP CRYSTAL GAUGE	2687.500 - 3025.000			
AC CBL VDL GR	453.000 - 1489.000	X		X
AC CBL VDL GR	1210.000 - 2500.000	X		X
PRESS. EVAL. LOG	314.000 - 3045.000		1:5000	
TEMP. DATA LOG	314.000 - 3045.000		1:5000	
DRILL. DATA PRESS.	314.000 - 3045.000		1:5000	
WIRELINE DATA PRESS	314.000 - 3045.000		1:5000	
MUD	314.000 - 3045.000			X
VELOCITY	2501.000 - 3041.000		1:1000	X
(Acoustic log calibration, 10cm/s				1 stk.)
(Interval velocity, 5-10 cm/s, 2501-3041 m,				1 stk.)
(Two-way travel time, 10cm/s				1 stk.)
(VSP, zero offset & compsite display				5 stk.)
(Synthetic seismogram, 10cm/s				1 stk.)

# DAILY DRILLING REPORT SYSTEM

MAIN OPERATIONS FOR WELL: 6507/11-04



Main operation	Minutes	Hrs	% of total
MOVING	11100	185,0	17,13
INTERRUPTION	4890	81,5	7,55
DRILLING	36240	604,0	55,93
FORMATION EVAL	9180	153,0	14,17
PLUG & ABANDON	3390	56,5	5,23
<i>Total</i>	<i>64800</i>	<i>1080,0</i>	<i>100,00</i>

## SUB OPERATIONS FOR WELL: 6507/11-04

### MAIN OPERATION: MOVING

Sub operation	Minutes	Hrs	% of total
TRANSIT	8670	144,5	78,11
ANCHOR	2430	40,5	21,89
<i>Total</i>	11100	185,0	100,00

### MAIN OPERATION: INTERRUPTION

Sub operation	Minutes	Hrs	% of total
MAINTAIN/REP	3060	51,0	62,58
WAIT	1140	19,0	23,31
FISH	690	11,5	14,11
<i>Total</i>	4890	81,5	100,00

### MAIN OPERATION: DRILLING

Sub operation	Minutes	Hrs	% of total
BOP/WELLHEAD EQ	3390	56,5	9,35
TRIP	7740	129,0	21,36
SURVEY	540	9,0	1,49
DRILL	13770	229,5	38,00
CIRC/COND	2010	33,5	5,55
HOLE OPEN	930	15,5	2,57
CASING	4980	83,0	13,74
BOP ACTIVITIES	1530	25,5	4,22
PRESS DETECTION	120	2,0	0,33
UNDERREAM	900	15,0	2,48
REAM	330	5,5	0,91
<i>Total</i>	36240	604,0	100,00

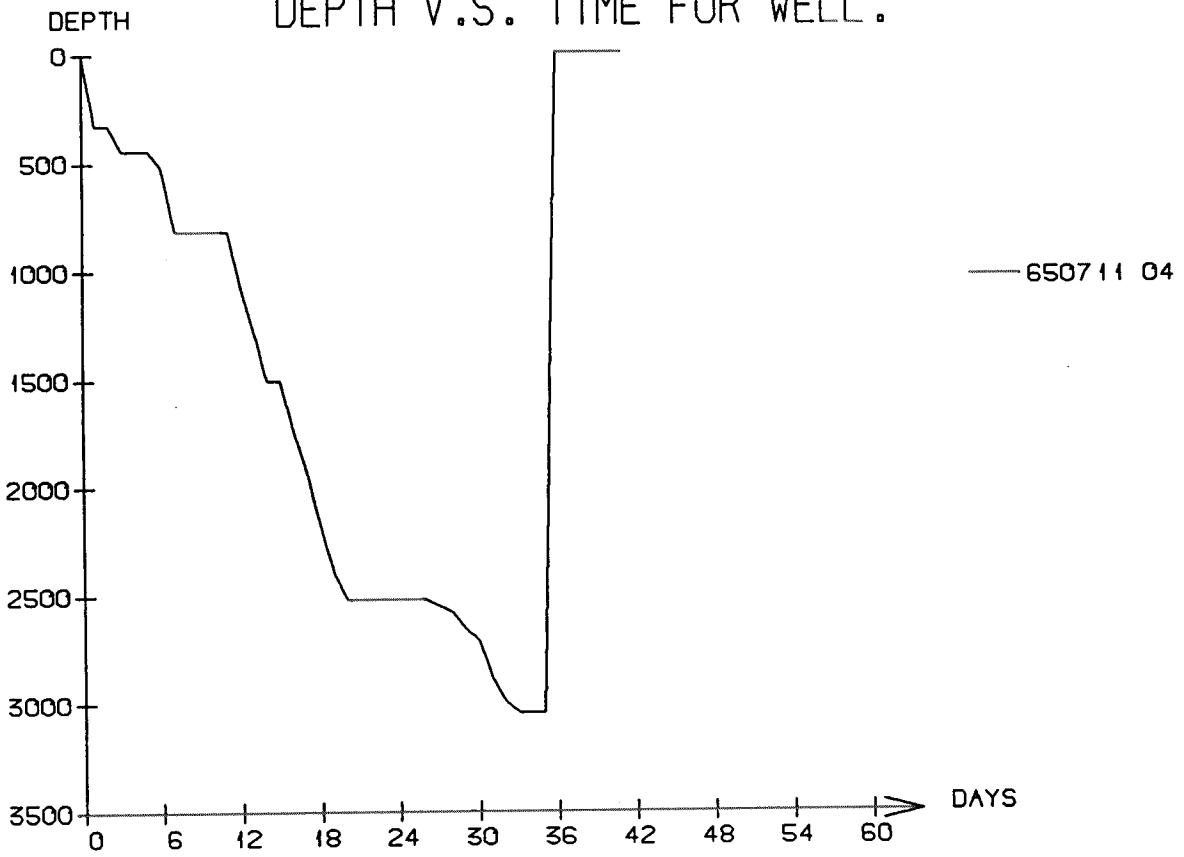
### MAIN OPERATION: FORMATION EVAL

Sub operation	Minutes	Hrs	% of total
LOG	4020	43,8	43,79
TRIP	2490	27,1	27,12
CIRC/COND	510	5,6	5,56
CORE	1530	16,7	16,67
OTHER	270	2,9	2,94
CIRC SAMPLES	210	2,3	2,29
RFT/FIT	150	1,6	1,63
<i>Total</i>	9180	100,0	100,00

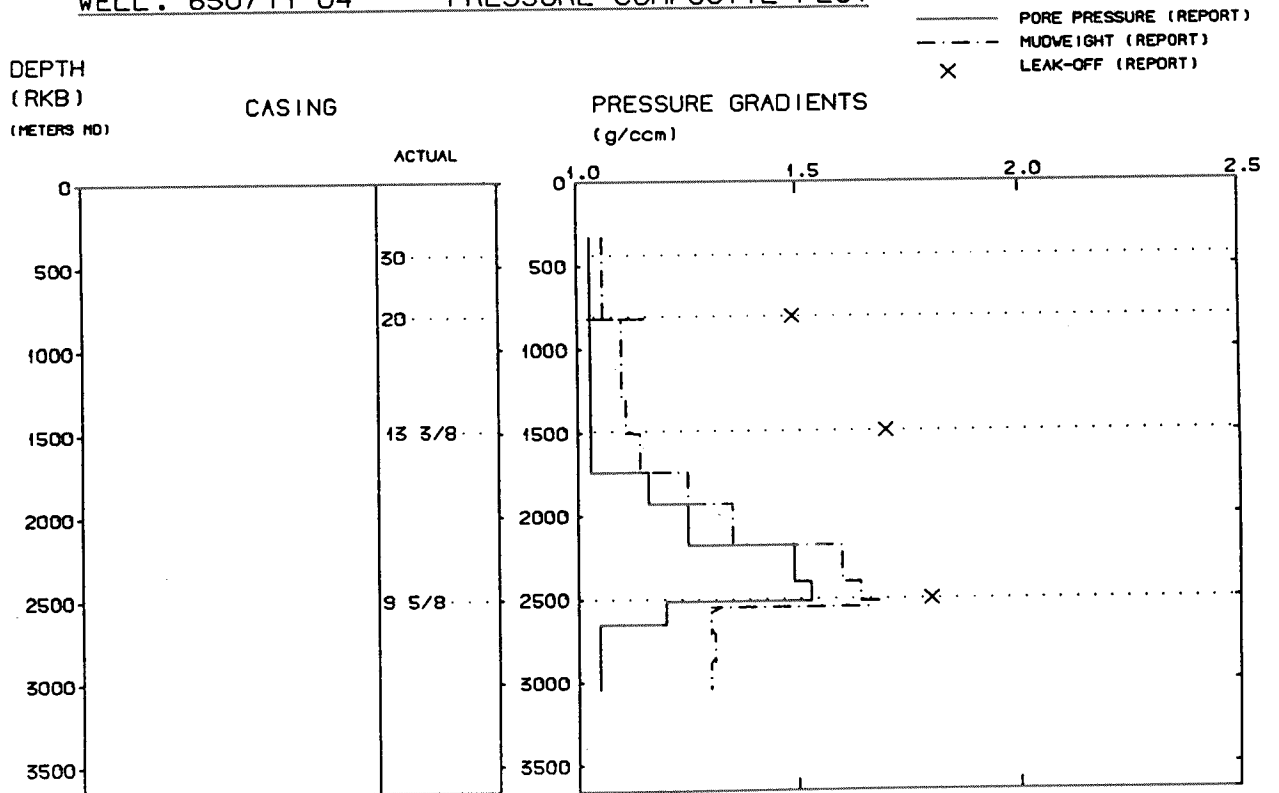
### MAIN OPERATION: PLUG & ABANDON

Sub operation	Minutes	Hrs	% of total
TRIP	1410	23,5	41,59
CEMENT PLUG	510	8,5	15,04
MECHANICAL PLUG	330	5,5	9,73
PERFORATE	420	7,0	12,39
SQUEEZE	60	1,0	1,77
EQUIP RECOVERY	660	11,0	19,47
<i>Total</i>	3390	56,5	100,00

# DEPTH V.S. TIME FOR WELL :



## WELL: 650711 04      PRESSURE COMPOSITE PLOT



## Well History 6507/11-4.

### GENERAL:

Well 6507/11-4 was designed to drill the Ypsilon-5 prospect, and test the hydrocarbon potential in the Jurassic rocks. The prospect is defined as a structural closure along the crest of a rotated NS extending fault block. Rotation occurred along a major westward dipping fault which defines the western boundary of the Midtgard Alpha segment. This resulted in steeply eastward dipping Jurassic layers with growth of the layers against the fault.

HC-bearing reservoir in Garn and Ile Formation has structural closure against Base Cretaceous Unconformity, and the Fangst Group was expected to come in at 2416 m RKB.

Shallow gas was predicted at the following levels: 470-532/539- 601- and 671 m RKB.

TD was prognosed to be reached at 2950 m RKB.

### OPERATIONS:

Wildcat well 6507/11-4 was spudded by Wilh. Wilhelmsen semi-submersible rig Treasure Saga 16 May 1987, and completed 22 June 1987, at a depth of 3045 m RKB in Early Jurassic rocks. No shallow gas was encountered at the expected levels. Drilling proceeded without any significant problems. Two cores were cut in the intervals 2564- 2593 m RKB, and 2685- 2713 m RKB.

Fangst Group came in at 2676.5 m RKB. No shows were observed in the two sandstone units, but the sandstones revealed good porosity. Plugged and abandoned as a dry well.

### TESTING:

No DST-tests were performed in this well.

# GEOLOGICAL TOPS

WELL: 6507/11-4

	<i>Depth m (RKB)</i>
<i>Nordland Group</i>	313,5
<i>Naust Fm</i>	313,5
<i>Kai Fm</i>	1380,0
<i>Hordaland Group</i>	1719,0
<i>Brygge Fm</i>	1719,0
<i>Rogaland Group</i>	2015,0
<i>Tare Fm</i>	2015,0
<i>Tang Fm</i>	2066,0
<i>Shetland Group</i>	2134,5
<i>Springar Fm</i>	2134,5
<i>Nise Fm</i>	2351,0
<i>Kvitnos Fm</i>	2396,0
<i>Cromer Knoll Group</i>	2521,5
<i>Lyr Fm</i>	2521,5
<i>Viking Group</i>	2529,5
<i>Spekk Fm</i>	2529,5
<i>Melke Fm</i>	2535,0
<i>Fangst Group</i>	2676,5
<i>Garn Fm</i>	2676,5
<i>Not Fm</i>	2732,0
<i>Ile Fm</i>	2747,0
<i>Båt Group</i>	2866,0
<i>Ror Fm</i>	2866,0
<i>Tilje Fm</i>	2992,0
<i>T.D.</i>	3045,0