

Well no : 30/ 9-03

Operator : HYDRO

Coordinates	: 60 28 16.33 N 02 45 37.55 E	UTM coord.	: 6704071 N
		UTM zone 31	: 486827 E
Licence no	: 079	Permit no	: 400
Rig	: NORTRYM	Rig type	: SEMI-SUB.
Contractor	: GOLAR-NOR OFFSHORE A/S		
Bottom hole temperature	: 57 deg.C	Elev. KB	: 25 M
Spud date	: 83.12.31	Water depth	: 110 M
Compl. date	: 84.03.06	Total depth	: 3113 M
Spud class.	: WILDCAT	Age at TD	: JURASSIC
Compl. class.	: P&A. OIL DISCOVERY		
Seis. loc.	: NH 82 - 065 SP 377		

LICENSEES

16.000	NORSK HYDRO PRODUKSJON A.S
10.500	SAGA PETROLEUM A.S.
73.500	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	221.0	36	222.0	
SURF.COND.	20	616.0	26	625.0	1.51
INTERM.	13 3/8	1699.0	17 1/2	1715.0	1.70
OPEN HOLE			12 1/4	3113.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	2714.5 - 2716.0	1.0	66.7	MIDDLE JURASSIC
2	2716.0 - 2719.7	3.3	89.2	MIDDLE JURASSIC
3	2719.7 - 2735.5	15.8	100.0	MIDDLE JURASSIC
4	2735.5 - 2753.5	18.0	100.0	MIDDLE JURASSIC
5	2753.5 - 2781.0	27.5	100.0	MIDDLE JURASSIC
6	2781.0 - 2802.0	19.0	90.5	MIDDLE JURASSIC
7	2802.0 - 2824.0	22.0	100.0	MIDDLE JURASSIC
8	2824.0 - 2842.5	17.6	95.1	MIDDLE JURASSIC
9	2842.5 - 2860.5	18.0	100.0	MIDDLE JURASSIC
10	2860.5 - 2870.0	8.9	93.7	MIDDLE JURASSIC
11	2870.0 - 2888.0	18.0	100.0	MIDDLE JURASSIC
12	2888.0 - 2906.5	18.5	100.0	MIDDLE JURASSIC
13	2995.0 - 3008.5	12.5	92.6	MIDDLE JURASSIC
14	3008.5 - 3026.5	18.0	100.0	MIDDLE JURASSIC
15	3026.5 - 3031.0	4.4	97.8	MIDDLE JURASSIC

MUD PROPERTIES

Depth below KB meter	Mud weight g/cm ³	Plastic viscosity mPa.s	Mud type
870.0	1.12	25.0	OIL BASED
1260.0	1.09	28.0	OIL BASED
1385.0	1.12		OIL BASED
1900.0	1.33	32.0	OIL BASED
2280.0	1.40	30.0	OIL BASED
2360.0	1.41	29.0	OIL BASED
2500.0	1.43	31.0	OIL BASED
2875.0	1.45	35.0	OIL BASED
2975.0	1.44	45.0	OIL BASED
3060.0	1.49	39.0	OIL BASED
3090.0	1.44	38.0	OIL BASED

DRILL STEM TEST

NO DST'S WERE PERFORMED IN THIS WELL

DRILL BIT CUTTINGS AND WET SAMPLES

<i>SAMPLE TYPE</i>	<i>INTERVAL BELOW KB</i>	<i>NUMBER OF SAMPLES</i>
<i>CUTTINGS</i>	<i>220 - 3112</i>	<i>495</i>
<i>WET SAMPLES</i>	<i>220 - 3112</i>	<i>525</i>

SHALLOW GAS

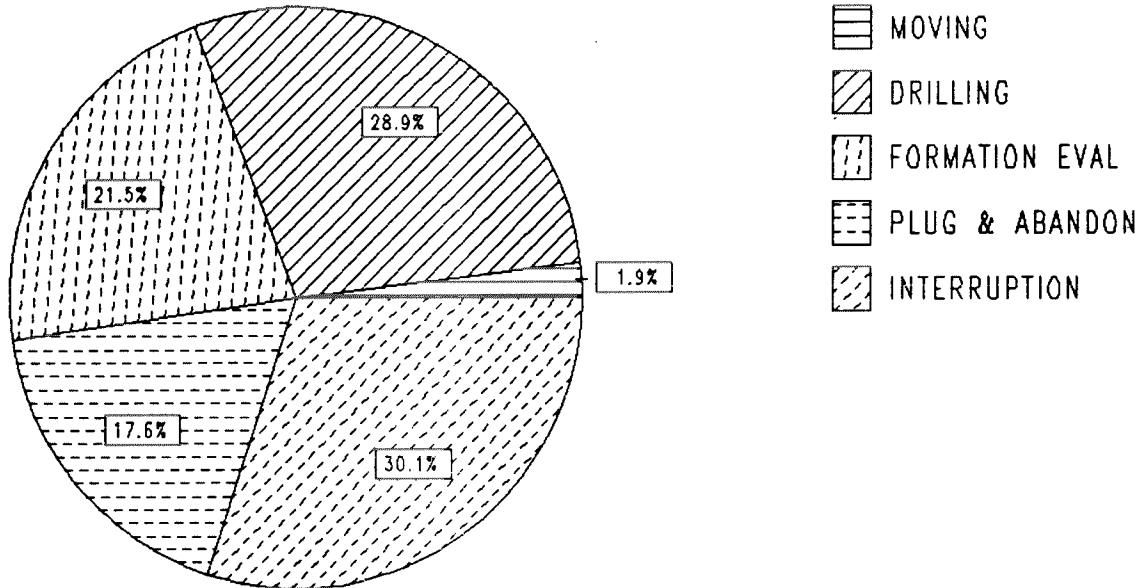
<i>INTERVAL BELOW KB</i>	<i>REMARKS</i>
	<i>NONE</i>

AVAILABLE LOGS

<i>LOG TYPE</i>	<i>INTERVALS</i>	<i>1/200</i>	<i>1/500</i>
<i>DIFL BHC AC GR (GR:130-226)</i>	<i>226 - 625</i>	<i>X</i>	<i>X</i>
<i>DIFL BHC AC</i>	<i>615 - 1713</i>	<i>X</i>	<i>X</i>
<i>CDL</i>	<i>615 - 1714</i>	<i>X</i>	<i>X</i>
<i>MUD</i>	<i>222 - 3113</i>		<i>X</i>

DAILY DRILLING REPORT SYSTEM

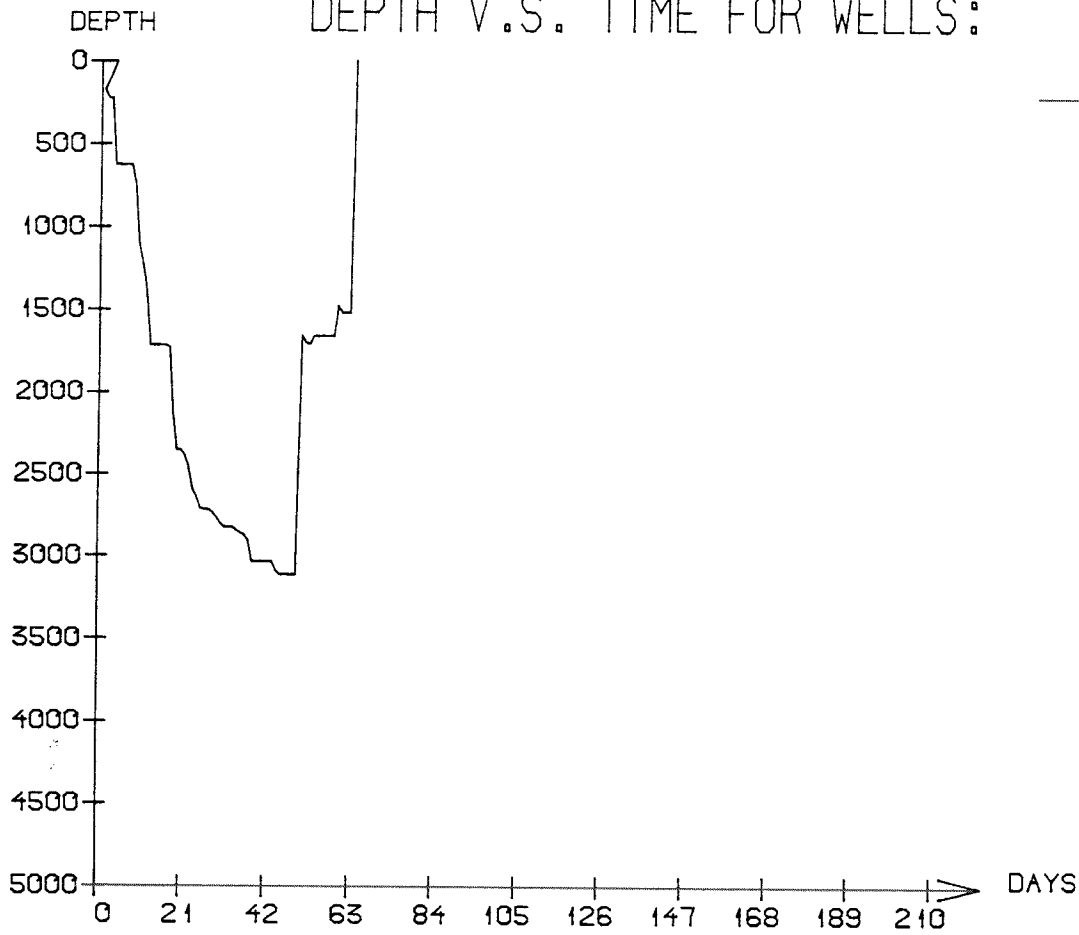
Main operation : 30/09-03



Total : 1416,50 HRS

Main operation	Hours	% of total
MOVING	27,00	1,91
DRILLING	409,50	28,91
FORMATION EVAL	304,50	21,50
PLUG & ABANDON	249,50	17,61
INTERRUPTION	426,00	30,07

DEPTH V.S. TIME FOR WELLS:



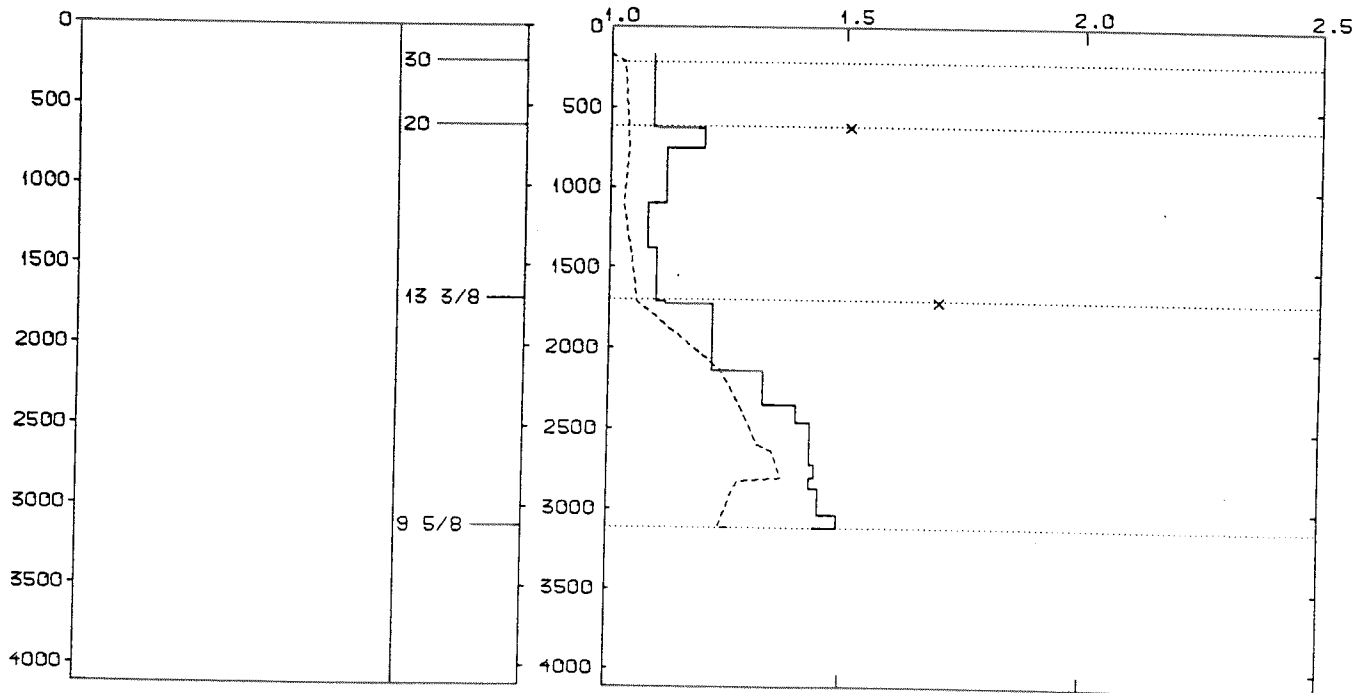
WELL: 003009 03 PRESSURE COMPOSITE PLOT

DEPTH
(RKB)
(METERS)

CASING

PRESSURE GRADIENTS
(g/ccm)

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



WELL HISTORY - 30/9-3

GENERAL:

The wildcat 30/9-3 was the first well to be drilled on the Gamma West structure. The main objectives were to find hydrocarbon accumulations in the Brent Group and to find additional hydrocarbon accumulations within the Lower Jurassic. The well encountered hydrocarbons in the Middle Jurassic Brent Group sandstones. No other hydrocarbon bearing reservoirs were encountered by this well.

OPERATIONS:

The well 30/9-3 was spudded 31.12.83 by the semi-submersible rig Nortrym. Fifteen cores were cut, all of them in the Brent Group. The well was drilled down into the Drake Formation shales where the pipe got stuck and parted when pulling out of hole for logging. The fish was not recovered. A cement plug was set and the cement was dressed down to 1660 m. The well 30/9-3 was sidetracked as well 30/9-3 A through a window in the 13 3/8" casing at 1539 m. The well was drilled with water based mud in the 36" and 26" hole sections. The mud was displaced to an oil based system after performing the leak off test below the 17 1/2" casing shoe.

TESTING:

No DST's were performed in this well.

GEOLOGICAL TOPS

WELL: 30/ 9-03

	<i>Depth m (RKB)</i>
<i>Nordland Group</i>	<i>200.000</i>
<i>Utsira Fm</i>	<i>600.000</i>
<i>Hordaland Group</i>	<i>850.000</i>
<i>Rogaland Group</i>	<i>2080.000</i>
<i>Lista Fm</i>	<i>2220.000</i>
<i>Våle Fm</i>	<i>2300.000</i>
<i>Shetland Group</i>	<i>2360.000</i>
<i>Viking Group</i>	<i>2655.000</i>
<i>Heather Fm</i>	<i>2655.000</i>
<i>Brent Group</i>	<i>2665.000</i>
<i>Ness Fm</i>	<i>2665.000</i>
<i>Dunlin Group</i>	<i>3045.000</i>
<i>Drake Fm</i>	<i>3045.000</i>
 <i>TD =</i>	 <i>3113.000</i>