

Well no : 30/ 6-11 Operator : HYDRO

Coordinates : 60 43 28.95 N UTM coord. : 6732311 N
 02 44 42.00 E 486088 E

Licence no : 053 Permit no : 358

Rig : NORTRYM Rig type : SEMI-SUB.

Contractor : GOLAR-NOR OFFSHORE A/S

Bottom hole temperature : 132 deg.C Elev. KB : 25 M

Spud. date : 82.12.20 Water depth : 121 M

Compl. date : 83.03.30 Total depth : 4001 M

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

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

Seisloca : ST 703 146 SP 974

LICENSEES

13,330 ELF AQUITAINE NORGE A/S
 12,500 NORSK HYDRO PRODUKSJON A.S
 10,000 MOBIL DEVELOPMENT NORWAY A/S
 7,500 SAGA PETROLEUM A.S
 50,000 DEN NORSKE STATS OLJESELSKAP A.S
 6,670 TOTAL MARINE NORSK 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	235,0	36	235,0	
SURF.COND.	20	951,0	26	965,0	1,76
INTERM.	13 3/8	2106,0	17 1/2	2165,0	1,70
INTERM.	9 5/8	3639,0	12 1/4	3654,0	1,93
OPEN HOLE			8 3/8	4001,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	3265.0 - 3267.0	1.8	90.0	MIDDLE JURASSIC
2	3452.0 - 3461.0	8.0	88.9	MIDDLE JURASSIC
3	3461.0 - 3468.5	4.9	65.3	MIDDLE JURASSIC
4	3468.5 - 3484.5	16.0	100.0	MIDDLE JURASSIC
5	3484.5 - 3502.5	17.1	95.0	MIDDLE JURASSIC
6	3502.5 - 3513.0	5.5	52.4	MIDDLE JURASSIC
7	3756.0 - 3770.0	12.0	85.7	LOWER JURASSIC

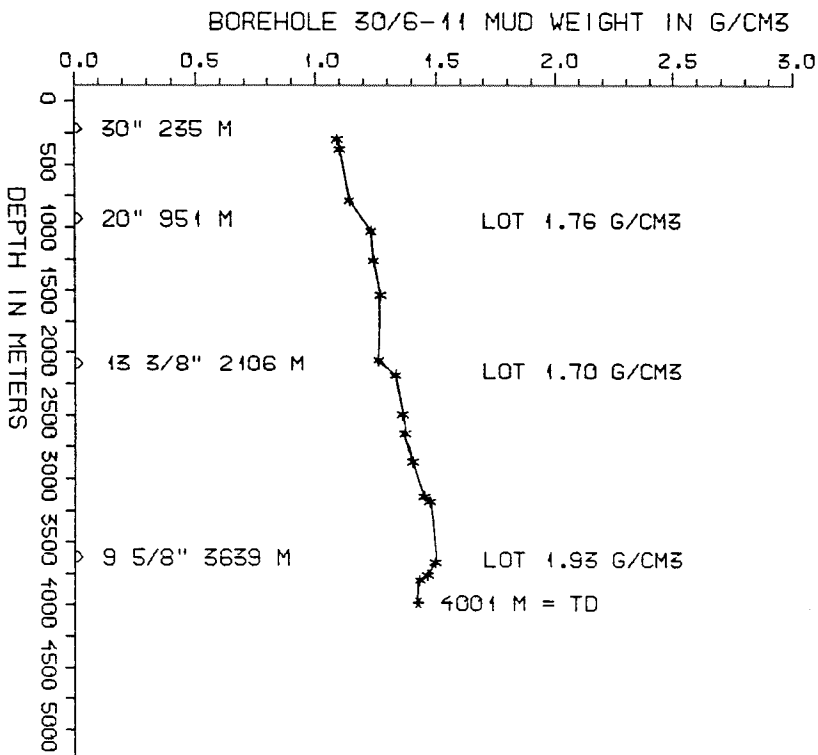
DRILL STEM TEST									
TEST NO	DEPTH BELOW KB	CHOKE SIZE mm	RECOVERY					PRESS. (psi)	
			OIL Sm3 /d	GAS M Sm3 /d	OIL GRAV. g/cm3	GAS GRAV. rel.air	GOR m3/m3	FSIP	WHP
1	3449 - 3455	6-25	ONLY	WATER					

AVAILABLE LOGS			
LOG TYPE	INTERVALS	1/200	1/500
DIFL BHC AC GR	234 - 959	x	
DIFL BHC AC	951 - 2151	x	
DIFL BHC AC	2104 - 3646	x	
DIFL BHC AC	3634 - 4001	x	
DIFL BHC AC	234 - 4001		x
FDC	951 - 2143	x	
FDC CNL	2104 - 3645	x	
FDC CNL	3634 - 4001	x	
FDC CNL	951 - 4001		x
DLL MLL	3200 - 3646	x	x
CDM	2104 - 3653	x	
CDM	3634 - 4001	x	
CDM AP	2104 - 3653	x	x
CDM AP	3634 - 4001	x	x
CDM AP (STRATADIP)	2104 - 3653	1:40	
GR COLLAR	3000 - 3500	x	
FMT	3259 - 3557		x
FMT	3464 - 3557		x
FMT	3745 - 3975		x
AC CBL VDL	2850 - 3634	x	
MUD	234 - 4001		x
VELOCITY	234 - 4001	1:1000	x
(Synthetic Seismogram, 10 cm/s		2stk)	
(Synthetic Seismogram Marine, 10 cm/s		1stk)	
(Two Way Travel Time, 10 cm/s		1stk)	
(Air Gun Well Velocity Survey and Calibr. L.D.		1stk)	

MUD PROPERTIES			
DEPTH BELOW KB m	WEIGHT g/cm ³	FUNNEL VISC. sec	FILTRATE LOSS cm ³
220	1.06		
300	1.07	100	
710	1.11	53	
950	1.20	41	
1190	1.21	50	
1465	1.24	50	
1980	1.23	54	
2100	1.30	54	
2420	1.33	60	
2570	1.34	65	
2790	1.37	56	
3060	1.42	52	
3110	1.44	50	
3580	1.46	45	
3680	1.43	42	
3720	1.40	50	
4001	1.40	51	

DRILL BIT CUTTINGS AND WET SAMPLES		
SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTINGS	235 - 4001	610
WET SAMPLES	240 - 4001	792

SHALLOW GAS	
DEPTH INTERVAL m KB	REMARKS
484	POSSIBLE SHALLOW GAS



WELL HISTORY - 30/6-11

GENERAL:

The primary objective of the wildcat 30/6-11 was to test for hydrocarbon accumulations in the Middle Jurassic sandstones of the Brent Group in the northern part of the block, on the Delta prospect. Secondary objectives were to locate further hydrocarbon accumulations in the Lower Jurassic Statfjord Formation. Both Jurassic reservoir are water bearing although good shows have been detected when drilling. According to RFT, there is no pressure connection between the Brent sandstone in Alpha and Delta structures.

OPERATIONS:

The well was spudded 20.12.82 by the semi-submersible rig Nortrym. 7 cores were taken, 6 from the Middle Jurassic sandstones and 1 from the Lower Jurassic. Two drilling breaks occurred, one on top of the Heather Formation and one on top of the Cook Formation. The well was drilled using waterbased mud.

TESTING:

One DST performed in the Brent Group produced water.

GEOLOGICAL TOPS
WELL 30/6-11

	Depth m (RKB)
Nordland group	146,0
Utsira Fm	720,5
Hordaland group	909,5
Rogaland group	2055,5
Balder Fm	2055,5
Sele Fm	2127,0
Lista Fm	2239,0
Montrose Group	2333,0
Maureen Fm	2333,0
Shetland Group	2351,0
Viking Group	3260,0
Draupne Fm	3260,0
Heather Fm	3264,0
Brent Group	3351,0
Ness Fm	3351,0
Etive Fm	3459,0
Dunlin Group	3561,0
Drake Fm	3561,0
Cook Fm	3752,5
Amundsen/Burton Fm	3768,5
Statfjord Fm	3892,5
TD =	4001,0