

Well no : 2/ 1-07 Operator : BP

Coordinates : 56 51 49.85 N UTM coord. : 6302375
 03 05 41.88 E 505790

Licence no : 19 Permit no : 431

Rig : GLOMAR MORAY F.I Rig type : JACK-UP

Contractor : GLOBAL MARINE DRILLING COMPANY

Bottom hole temperature : 165.5 deg.C Elev. KB : 38 M

Spud. date : 84.09.06 Water depth : 69 M

Compl. date : 85.03.06 Total depth : 5464 M

Spud. class : WILDCAT Form. at TD : PERMIAN

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

Seisloca : 80 - 30A SP. 1630

LICENSEES

26.625000 BP PETROLEUM DEVELOPMENT OF NORWAY A.S
 19.375000 CONOCO NORWAY INC.
 4.000000 KS PELICAN & CO A/S
 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
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CONDUCTOR	30	171.0	36	171.0	
SURF. COND.	20	745.0	26	755.0	1.70
INTERM.	13 3/8	2473.0	17 1/2	2490.0	1.92
INTERM.	9 5/8	3873.0	12 1/4	3878.0	2.12
LINER	7	5076.0	8 1/2	5464.0	2.20

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	5115.0 - 5124.2	9.2	100.0	PERMIAN
2	5124.2 - 5125.5	1.3	100.0	PERMIAN
3	5125.5 - 5127.0	1.5	100.0	PERMIAN
4	5147.0 - 5165.0	18.0	100.0	PERMIAN

MUD PROPERTIES

Depth below KB meter	Mud weight g/cm3	Plastic viscosity mPa.s	Mud type
151.000	1.03		WATER BASED
220.000	1.06		WATER BASED
521.000	1.08	4.0	WATER BASED
755.000	1.12	5.0	WATER BASED
937.000	1.15	14.0	WATER BASED
1170.000	1.21	14.0	WATER BASED
1397.000	1.38	14.0	WATER BASED
1684.000	1.45	16.0	WATER BASED
1840.000	1.48	26.0	WATER BASED
2136.000	1.50	32.0	WATER BASED
2277.000	1.55	30.0	WATER BASED
2683.000	1.57	23.0	WATER BASED
3702.000	1.60	31.0	WATER BASED
3747.000	1.58	34.0	WATER BASED
3858.000	1.62	36.0	WATER BASED
3878.000	1.65	37.0	WATER BASED
3904.000	1.80	30.0	WATER BASED
3919.000	1.85	30.0	WATER BASED
4333.000	1.84	47.0	WATER BASED
4677.000	1.90	57.0	WATER BASED
4870.000	1.94	62.0	WATER BASED
5066.000	1.96	70.0	WATER BASED
5081.000	1.92	56.0	WATER BASED
5089.000	1.93	54.0	WATER BASED
5185.000	1.72	29.0	WATER BASED
5465.000	1.70	34.0	WATER BASED

DRILL STEM TEST

NO DST'S WERE PERFORMED IN THIS WELL

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting		
Wet Samples		

SHALLOW GAS

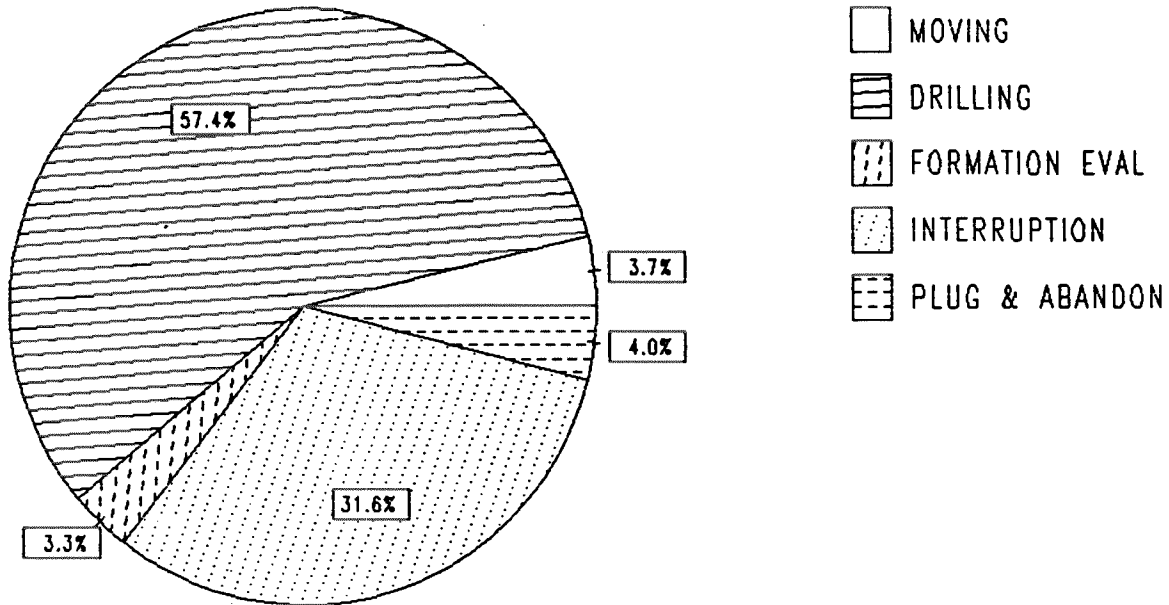
Interval below KB	REMARKS
	NONE

AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500
ISF SLS SP GR	171 - 754	X	
ISF SLS	744 - 2462	X	
ISF SLS MSFL SP CAL	2473 - 3879	X	
ISF SLS MSFL SP CAL	3876 - 4292	X	
ISF SLS MSFL SP CAL	5083 - 5193	X	
ISF SLS MSFL	171 - 5193	1:1000	X
BHC MSFL CAL	3876 - 5081	X	X
LDL CNL NGT	3876 - 5072	X	X
LDL CNL	5083 - 5194	X	X
DLL MSFL NGT SP	3876 - 5079	X	X
DLL SP	5083 - 5190	X	X
CDM AP	3876 - 4294	X	X
SHDT	3876 - 4293	X	
CYBERDIP	3876 - 4293	X	X
NGT RATIOS PLAYBACK	3876 - 5062	X	X
RFT, 6 SECS.	5077 - 5103	X	
RFT, 6 SECS.	5115 - 5145	X	
RFT, 6 SECS.	5111 - 5179	X	
CBL BOND INDEX	450 - 1000	X	X
CBL VDL	2350 - 5077	X	X
MUD	200 - 5465		X
VELOCITY	140 - 5150		X
(+ Synthetic Seismogram, Geogram, 10 + 20 cm/s,			6 stk)
(+ V.S.P.	150 - 5185		1 stk)

DAILY DRILLING REPORT SYSTEM

Main operation 02/01-07 :



Total : 4488 HRS

Main operation	Minutes	Hours	% of total
MOVING	9975	166.25	3.70
DRILLING	154515	2575.25	57.38
FORMATION EVAL	9000	150.00	3.34
INTERRUPTION	85050	1417.50	31.58
PLUG & ABANDON	10740	179.00	3.99

MAIN OPERATIONS WELL : 02/01-07

MAIN OPERATION: DRILLING

Sub operations	Min	Hrs	% of total
TRIP	38670	644.50	25.03
HOLE OPEN	150	2.50	0.10
SURVEY	2415	40.25	1.56
DRILL	59325	988.75	38.39
REAM	7845	130.75	5.08
CIRC/COND	8325	138.75	5.39
CASING	18330	305.50	11.86
BOP/WELLHEAD EQ	13425	223.75	8.69
OTHER	135	2.25	0.09
BOP ACTIVITIES	3465	57.75	2.24
PRESS DETECTION	1110	18.50	0.72
WAIT	1320	22.00	0.85
TOTAL	154515	2575.25	

MAIN OPERATION: MOVING

Sub operations	Min	Hrs	% of total
JACK	3410	56.83	34.19
ANCHOR	290	4.83	2.91
SKID	2630	43.83	26.37
TRANSIT	3645	60.75	36.54
TOTAL	9975	166.25	

MAIN OPERATION: FORMATION EVAL

Sub operations	Min	Hrs	% of total
LOG	7350	122.50	81.67
CORE	870	14.50	9.67
REF/FIT	450	7.50	5.00
CIRC SAMPLES	330	5.50	3.67
TOTAL	9000	150.00	

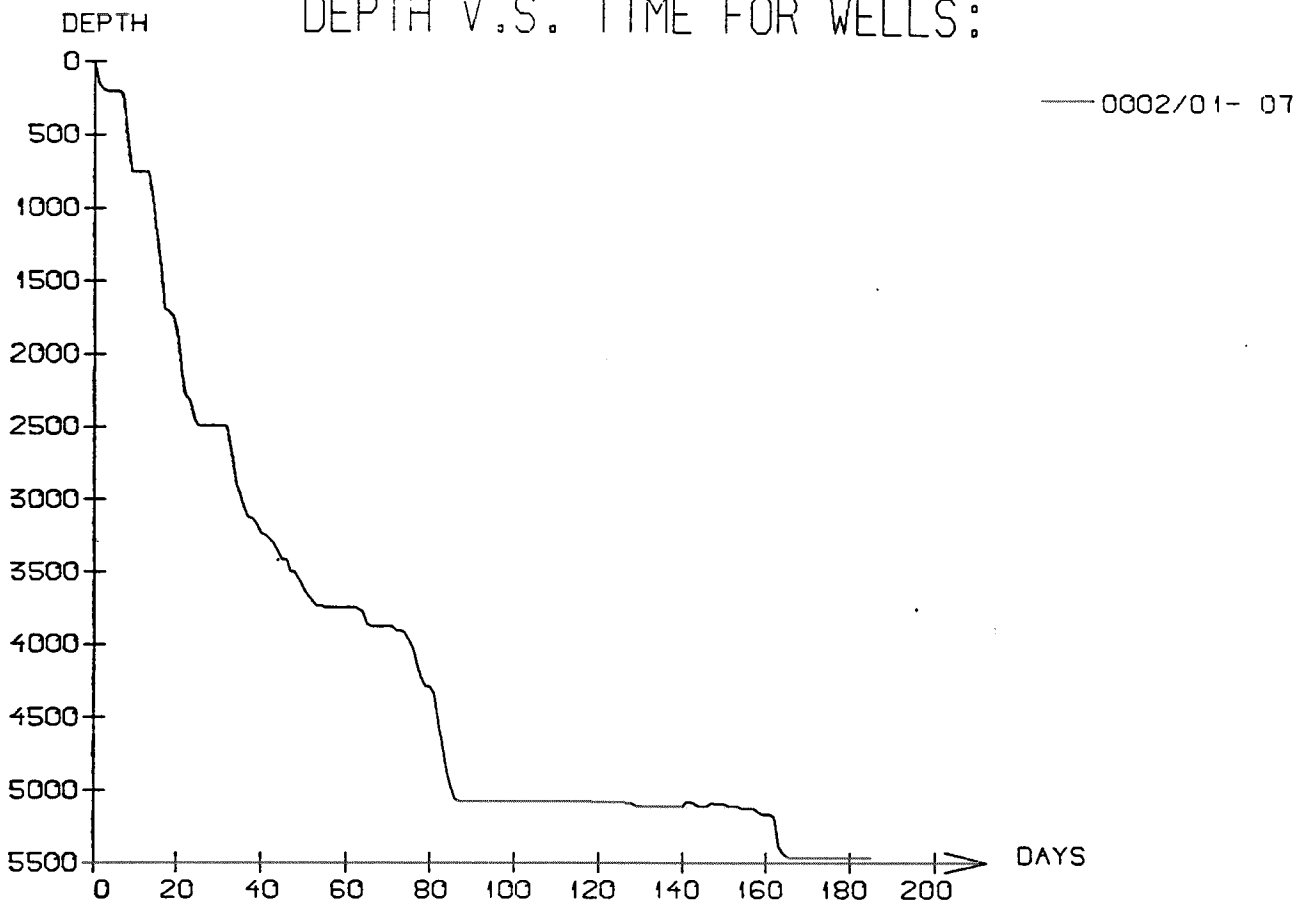
MAIN OPERATION: INTERRUPTION

Sub operations	Min	Hrs	% of total
MAINTAIN/REP	5415	90.25	6.37
LOST CIRC	165	2.75	0.19
FISH	63360	1056.00	74.50
WAIT	510	8.50	0.60
SIDETRACK	15600	260.00	18.34
TOTAL	85050	1417.50	

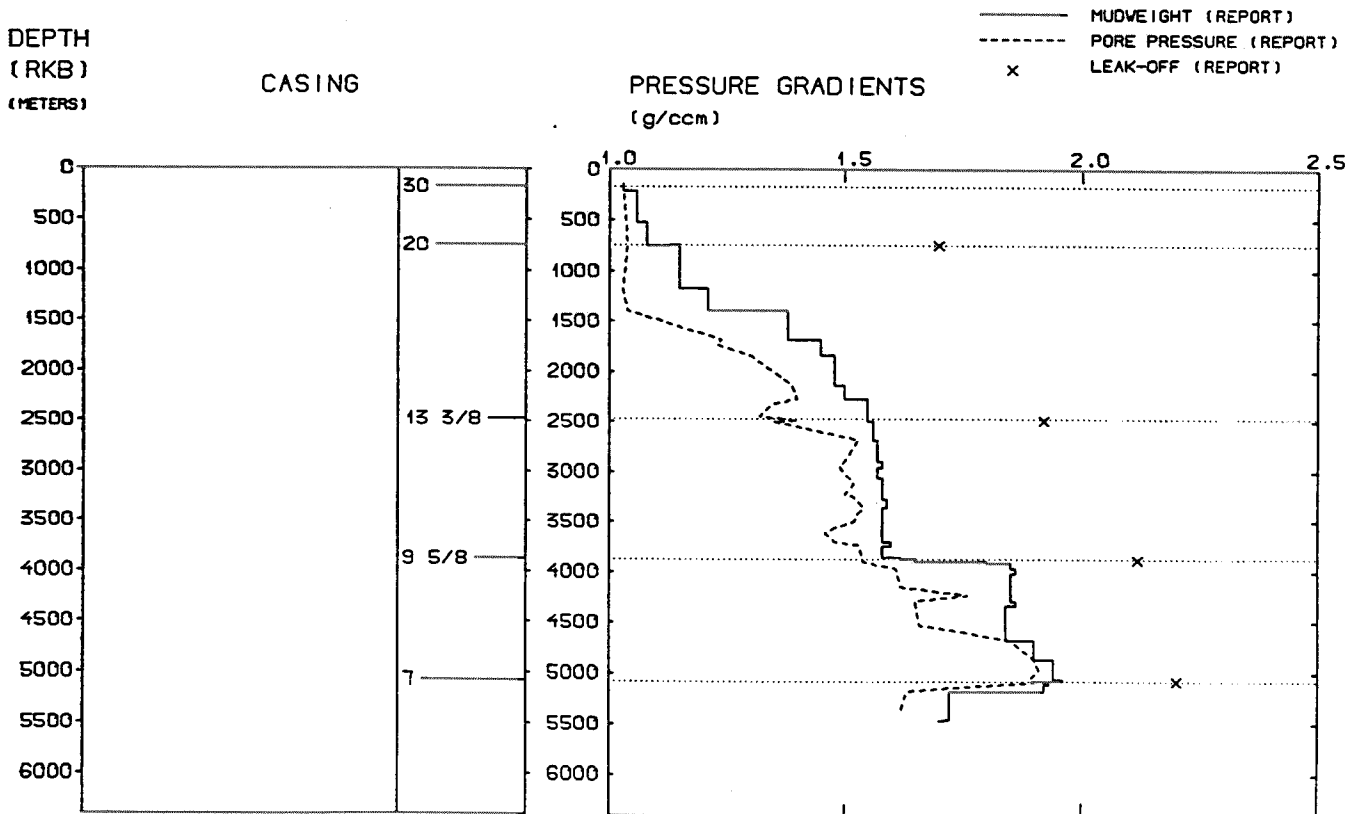
MAIN OPERATION: PLUG & ABANDON

Sub operations	Min	Hrs	% of total
TRIP	2475	41.25	23.04
CIRC/COND	195	3.25	1.82
CEMENT PLUG	855	14.25	7.96
EQUIP RECOVERY	900	15.00	8.38
CUT	6210	103.50	57.82
OTHER	105	1.75	0.98
TOTAL	10740	179.00	

DEPTH V.S. TIME FOR WELLS:



WELL: 000201 07 PRESSURE COMPOSITE PLOT



WELL HISTORY 2/1-7

GENERAL:

Wildcat well 2/1-7 was drilled on a previously undrilled structure in the center of block 2/1. The primary target was Rothliegendes sandstone in a large fault bounded structure mapped at base Zechstein Group level. A secondary objective was Upper Jurassic sandstone in a possible extension of the 2/1-north oil accumulation.

OPERATIONS:

The well was spudded 6 September 1984 by the jack-up rig Glomar Moray Firth I. Loss of mud at 1710 m was stopped by pumping lost circulation material, without changing the mudweight. Top chalk came in at 3190 m. This whole sequence was drilled with turbine. At 3746 m the drillstring got stuck, and the tight interval was located between 2600-2900 m. The string was freed by circulating acidulous mud. Full circulation was maintained during this whole operation. While pulling out to change bit at 5077 m the drillstring was lost in the hole. At the same time 170 bbls of mud was lost. One reason for this mudloss could be the "piston effect" caused by the drillstring falling down the hole. The pipe was fished out piece by piece, and the stabilisers above the bit were milled out. At 5081 m the drillstring was screwed off 300 m above the bit. Fishing was successful and drilling continued. Drilling was stopped at 5113 m to perform pressure test. During this operation, before reliable results were obtained, the RFT-tool got stuck in the hole. After extensive fishing the operator decided to plugg back and sidetrack the hole. The technical sidetrack was kicked off at 5092 m, and drilled to 5119 m. Problems at this depth made another sidetrack necessary, and the hole was plugged back to 4747 m and the new sidetrack was kicked off from 5080 m and drilled to a TD of 5464 m RKB, 5426 m MSL, which makes this hole 4 m short of being the deepest hole so far drilled in the Norwegian Sector. The secondary objective, Upper Jurassic sandstone was absent in this hole. Ula formation was water bearing. Rothliegendes sand in the bottom of the well showed good reservoir qualities, but was also water bearing. There were no significant hydrocarbon shows in any section of the well. 4 cores were cut.

GEOLOGICAL TOPS

WELL: 2-1-7

Depth m (RKB)

<i>Nordland Group</i>	160
<i>Hordaland Group</i>	1830
<i>Rogaland Group</i>	2917
<i>Balder Fm.</i>	2917
<i>Sele Fm.</i>	2939
<i>Forties Fm.</i>	2948
<i>Lista Fm.</i>	3018
<i>Maureen Fm. eqv.</i>	3093
<i>Chalk Group</i>	3187
<i>Ekofisk Fm.</i>	3187
<i>Tor Fm.</i>	3275
<i>Hod Fm.</i>	3648
<i>Blodøks Fm.</i>	3771
<i>Hidra Fm.</i>	3786
<i>Cromer Knoll Group</i>	3802
<i>Rødby Fm.</i>	3802
<i>Sola Fm.</i>	3886
<i>Tyne Group</i>	3974
<i>Mandal Fm.</i>	3974
<i>Haugesund Fm.</i>	3996
<i>Vestland Group</i>	4024
<i>Ula Fm.</i>	4024
<i>Bryne Fm.</i>	4061
<i>"Triassic Group"</i>	4105
<i>Zechstein Group</i>	4332
<i>Kupfer Schifer Fm.</i>	5083
<i>Rothliegende Group</i>	5084
<i>T.D.</i>	5465