

Well no : 6205/3-1

Operator : HYDRO

Coordinates : 62° 57' 08.62" N
05° 56' 38.11" E
Licence no : 154
Rig : MÆRSK JUTLANDER
Contractor : MÆRSK DRILLING A/S
Bottom hole temp: 107 °C
Spud. date : 89.10.24
Compl. date : 90.02.11
Spud. class : WILDCAT
Compl. class : SUSP.
Seisloca : NM1 - 809 SP 820

UTM coord. : 698387290 N
64932884 E
Permit no : 623
Rig type : SEMI-SUB.
Elev. KB : 22 M
Water depth : 157 M
Total depth : 4300 M
Form. at TD
Prod.form. :

LICENSEES

20,000000 NORSK HYDRO PRODUKSJON A.S
10,000000 PETROBRAS NORGE A/S
12,000000 A/S NORSKE SHELL
50,000000 DEN NORSKE STATS OLJESELSKAP A.S
8,000000 DEMINEX (NORGE) A/S

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm ³
CONDUCTOR	30	268,0	36	269,0	
INTERM.	20	975,0	26	1017,0	1,62
INTERM.	13 3/8	2671,0	17 1/2	2689,0	1,70

MUD

Depth	Mud weight	Visc.	Mud type
188,000	1,05		WATER BASED
975,000	1,18	13,0	WATER BASED
975,000		13,0	WATER BASED
1017,000	1,03		WATER BASED
1017,000	1,25		WATER BASED
1017,000	1,00		WATER BASED
1017,000	1,03		WATER BASED
1017,000	1,50		WATER BASED
1017,000	1,30		WATER BASED
1017,000	1,35		WATER BASED
1017,000	1,03		WATER BASED
1257,000	1,21	14,0	WATER BASED
1469,000	1,24	23,0	WATER BASED
1526,000	1,23	12,0	WATER BASED
1620,000	1,21	19,0	WATER BASED
1777,000	1,23	28,0	WATER BASED
1850,000	1,22	18,0	WATER BASED
2387,000	1,20	18,0	WATER BASED
2456,000	1,21	18,0	WATER BASED
2686,000	1,20	18,0	WATER BASED
2689,000	1,22	22,0	WATER BASED
2689,000	1,21	19,0	WATER BASED
2689,000	1,20	18,0	WATER BASED
2800,000	1,22	17,0	WATER BASED

Depth	Mud weight	Visc.	Mud type
2815,000	1,22	17,0	WATER BASED
3851,000	1,23	22,0	WATER BASED
3973,000	1,22	21,0	WATER BASED
4011,000	1,27	22,0	WATER BASED
4011,000	1,22	21,0	WATER BASED
4227,000	1,27	15,0	WATER BASED
4232,000	1,28	21,0	WATER BASED
4293,000	1,27	19,0	WATER BASED
4300,000	1,31	18,0	WATER BASED
4300,000	1,30	21,0	WATER BASED
4300,000	1,31	21,0	WATER BASED
4300,000	1,30	21,0	WATER BASED
4300,000	1,03	1,0	WATER BASED
4300,000	1,30	22,0	WATER BASED
4300,000	1,31	17,0	WATER BASED
4300,000	1,28	21,0	WATER BASED
4300,000	1,28	14,0	WATER BASED
4300,000	1,31	19,0	WATER BASED
4300,000	1,30	23,0	WATER BASED

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	1020 - 5260	330
CUTTINGS	1020 - 5260	570

SHALLOW GAS

Interval below KB	Remarks
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AVAILABLE LOGS

Log type	Intervals	1/200	1/500	Div.
AMS	930,0 - 2620,0		X	
AMS	2587,0 - 3975,0		X	
AMS	3940,0 - 4281,0		X	
MSFL LSS	3300,0 - 3500,0	X	X	
MSFL CALI	3940,0 - 4296,0	X	X	
DIL GR BHC SP	239,0 - 535,0	X	X	
DIL LSS GR SP	976,0 - 2680,0	X	X	
DIL LSS GR SP	2671,0 - 4006,0	X	X	
DIL LSS GR SP	3940,0 - 4298,0	X	X	
DIL LSS MSFL GR SP	3940,0 - 4298,0	X	X	
DRILL.DATA PRES.LOG	182,0 - 4300,0			1:5000
FMS GR	3970,0 - 4199,0	X		
FMS GR	4140,0 - 4296,0	X		
CBL VDL GR	2200,0 - 2665,0	X		
LDL	182,0 - 4292,0	X	X	
LDL CNL	3940,0 - 4292,0	X	X	

Log type	Intervals		1/200	1/500	Div.
LDL	2671,0	- 3993,0	X	X	
MWD	182,0	- 2669,0		X	
MWD	3779,0	- 4300,0		X	
MUD	182,0	- 4300,0		X	1:1000
CBL VDL	2200,0	- 2665,0	X		
CDM AP / SHDT	4140,0	- 4296,0	X	X	
VELOCITY LOG	980,0	- 4290,0		X	
SYNTHETIC SEISMOGRAM	10 cm/s				4
TWO WAY TRAVEL TIME	10 cm/s				1
VSP	10 cm/s	, 20 cm/s			16

Main operations for well: 6205/3-1**Main operation: DRILLING**

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	4230	70,5	3,64
BOP/WELLHEAD EQ	4470	74,5	3,85
CASING	14580	243,0	12,55
CIRC/COND	4560	76,0	3,92
DRILL	47940	799,0	41,25
HOLE OPEN	3660	61,0	3,15
OTHER	2790	46,5	2,40
REAM	8430	140,5	7,25
SURVEY	30	0,5	0,03
TRIP	25530	425,5	21,97
Total	116220	1937,0	100,00

Main operation: FORMATION EVAL

Sub operation:	Minutes:	Hours:	% of total:
CIRC/COND	240	4,0	3,02
CORE	570	9,5	7,17
LOG	4830	80,5	60,75
OTHER	120	2,0	1,51
TRIP	1650	27,5	20,75
WAIT	540	9,0	6,79
Total	7950	132,5	100,00

Main operation: INTERRUPTION

Sub operation:	Minutes:	Hours:	% of total:
FISH	7080	118,0	22,69
MAINTAIN/REP	11160	186,0	35,77
OTHER	1170	19,5	3,75
WAIT	10140	169,0	32,50
WELL CONTROL	1650	27,5	5,29
Total	31200	520,0	100,00

Main operation: MOVING

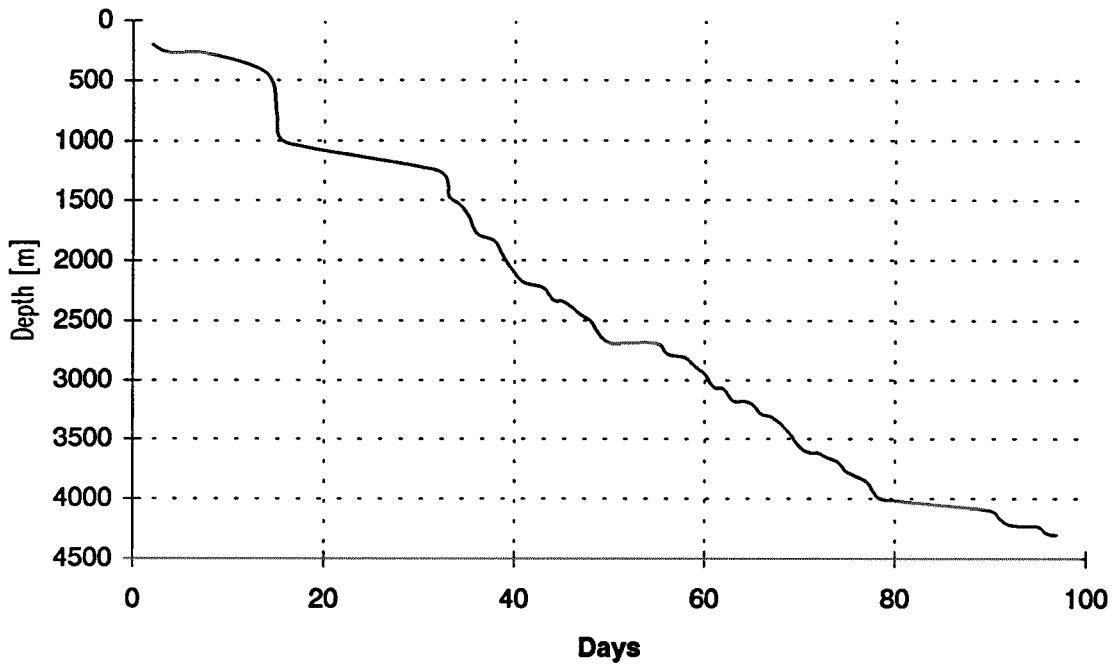
Sub operation:	Minutes:	Hours:	% of total:
ANCHOR	2100	35,0	59,83
TRANSIT	1410	23,5	40,17
Total	3510	58,5	100,00

Main operation: PLUG & ABANDON

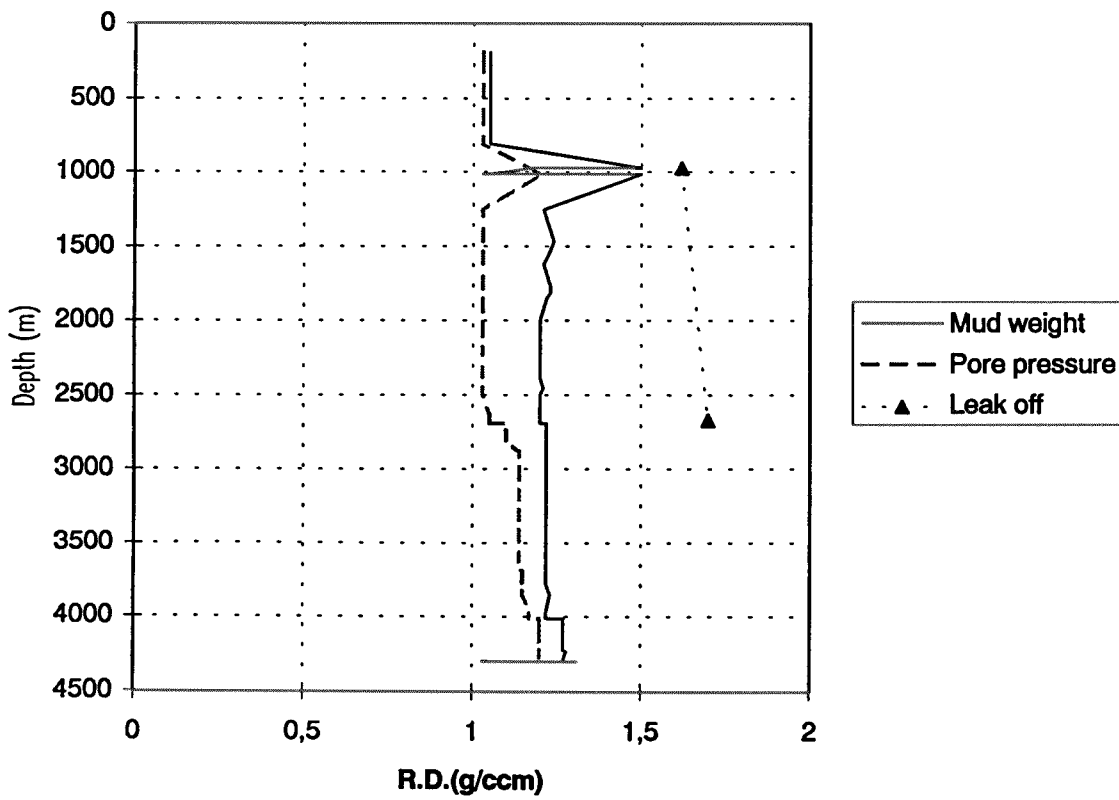
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	150	2,5	6,25
CIRC/COND	30	0,5	1,25
OTHER	1110	18,5	46,25
TRIP	1110	18,5	46,25
Total	2400	40,0	100,00

Total time used: 2688,0 Hours

Depth vs time for well: 6205/3-1



Composite plot for well: 6205/3-1



Well History 6205/3-1.

General:

Well 6205/3-1 is situated in the northern part of the block on the B-prospect, which is an easterly tilted faultblock bounded to the west by a northeast-southwest trending normal fault. The reservoir sequences are truncated at the crest of the faultblock. The license area is bounded to the east and south by the More-Trøndelag Fault Zone, and to the north by the Jan Mayen fracture zone and the Froya High. The Gossa High is situated in the western part of the license area at the western boundary of the Møre Basin. Well 6205/3-1 was the first well in the Møre area, and no direct correlation to the Haltenbanken or northern North Sea was possible. The main targets of well 6205/3-1 was sandstones of assumed Middle to Early Jurassic age. The primary objectives of the well were to:

- prove oil in the Jurassic sandstones.

- verify the structural and sedimentological interpretation of the area.

Secondary objective was to drill in a position with good seismic data quality. The well was planned to be drilled to a total depth of 5100 m RKB and would serve as the first commitment well in the license. Due to high rates of sedimentation in the Jurassic sequence, overpressure was expected in that interval. No significant indications of shallow gas was interpreted from the site survey.

Operations:

Wildcat well 6205/3-1 was spudded 24 October 1989 by the semi-submersible rig Mærsk Jutlander and re-spudded on 29 October 1989 after high angle had developed in the surface hole, and was suspended due to environmental restrictions 11 February 1990 at a depth of 4300 m RKB in rocks of Early Cretaceous age, the Åsgard formation. None of the objective horizons were penetrated. One conventional core was cut in the Cromer Knoll Group from 4220 to 4228.4 m RKB. A total of 120 side wall cores were attempted, and 79 wererecovered. No shallow gas was encountered while drilling this well. A kickoff was carried out at 2800 m RKB using bent sub and motor from 2800 to 2886 m RKB in two bit runs due to problems in receiving tool face from MWD. Apart from some experiences with tight hole, drilling went on without any significant problems.

Testing:

No DST tests were performed in this well.

Geological Tops.

Well:6205/3-1.

	Depth m (RKB).
Nordland Group	182,0
Rogaland Group	308,0
Sele Fm	308,0
Lista Fm	1220,0
Egga Unit mb.	1317,0
Shetland Group	1482,0
Jorsalfare Fm	1482,0
Kyrre Fm	1573,0
Tryggvason Fm	2425,0
Blodøks Fm	2876,0
Svarte Fm	2891,0
Cromer Knoll Group	3233,0
Rødby Fm	3133,0
Agat Fm	3179,0
Sola Fm	3780,0
Åsgard Fm	3956,0
Bua Unit mb.	4250,0
Åsgard Fm	4279,0
T.D.	4300,0