

| | | | |
|-------------------|--------------------------------------|---------------|---------------------------|
| Well no : | 6205/3-1 R | Operator : | HYDRO |
| Coordinates : | 62° 57' 08.62" N 05° 56' 38.11" E | UTM coord. : | 698387290 N 64932884 E |
| Licence no : | 154 | Permit no : | 623 |
| Rig : | MÆRSK JUTLANDER | Rig type : | SEMI-SUB. |
| Contractor : | MÆRSK DRILLING A/S | | |
| Bottom hole temp: | 151 °C | Elev. KB : | 23 M |
| Spud. date : | 90.09.20 | Water depth : | 157 M |
| Compl. date : | 90.11.30 | Total depth : | 5264 M |
| Spud. class : | WILDCAT | Form. at TD | JURASSIC ? |
| Compl. class : | P&A. SHOWS | Prod.form. : | |
| Seisloca : | NMI 809, SP. 820 | | |

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 AS |

CASING AND LEAK-OFF TESTS

| Type | Casing diam. | Depth below KB | Hole diam. | Hole depth below KB | Lot mud eqv. g/cm3 |
|---------|--------------|----------------|------------|---------------------|--------------------|
| INTERM. | 9 5/8 | 4284,0 | 12 1/4 | 4290,0 | |
| LINER | 7 | 4498,0 | 8 1/2 | 4500,0 | |

CONVENTIONAL CORES

| Core no. | Intervals cored meters | Recovery | | |
|----------|------------------------|----------|------|-------|
| | | M | % | |
| 1 | 4220,0 | - 4227,3 | 7,3 | 100,0 |
| 2 | 4332,0 | - 4340,0 | 8,0 | 100,0 |
| 3 | 4449,0 | - 4452,0 | 3,0 | 100,0 |
| 4 | 4787,0 | - 4789,5 | 2,5 | 100,0 |
| 5 | 4963,0 | - 4980,6 | 17,6 | 100,0 |
| 6 | 5016,0 | - 5021,6 | 5,6 | 100,0 |
| 7 | 5252,0 | - 5262,8 | 10,8 | 100,0 |

MUD

| Depth | Mud weight | Visc. | Mud type |
|----------|------------|-------|-------------|
| 553,000 | 1,43 | 10,0 | WATER BASED |
| 4300,000 | 1,26 | 12,0 | WATER BASED |
| 4300,000 | 1,25 | 7,0 | DUMMY |
| 4300,000 | 1,30 | 12,0 | WATER BASED |
| 4316,000 | 1,43 | 10,0 | WATER BASED |

| Depth | Mud weight | Visc. | Mud type |
|----------|------------|-------|-------------|
| 4332,000 | 1,30 | 13,0 | WATER BASED |
| 4401,000 | 1,37 | 17,0 | WATER BASED |
| 4435,000 | 1,75 | 15,0 | WATER BASED |
| 4451,000 | 1,37 | 19,0 | WATER BASED |
| 4461,000 | 1,39 | 17,0 | WATER BASED |
| 4500,000 | 1,75 | 16,0 | WATER BASED |
| 4500,000 | 1,43 | 10,0 | WATER BASED |
| 4500,000 | 1,56 | 12,0 | WATER BASED |
| 4500,000 | 1,75 | 15,0 | WATER BASED |
| 4500,000 | 1,43 | 10,0 | WATER BASED |
| 4500,000 | 1,75 | 16,0 | WATER BASED |
| 4500,000 | 1,43 | 10,0 | WATER BASED |
| 4500,000 | 1,75 | 18,0 | WATER BASED |
| 4516,000 | 1,39 | 15,0 | WATER BASED |
| 4549,000 | 1,45 | 17,0 | WATER BASED |
| 4592,000 | 1,50 | 17,0 | WATER BASED |
| 4736,000 | 1,55 | 16,0 | WATER BASED |
| 4790,000 | 1,62 | 18,0 | WATER BASED |
| 5034,000 | 1,70 | 16,0 | WATER BASED |
| 5111,000 | 1,76 | 18,0 | WATER BASED |
| 5111,000 | 1,75 | 18,0 | WATER BASED |
| 5133,000 | 1,76 | 20,0 | WATER BASED |
| 5264,000 | 1,75 | 14,0 | WATER BASED |

DRILL BIT CUTTINGS AND WET SAMPLES

| Sample type | Interval below KB | Number of samples |
|-------------|-------------------|-------------------|
|-------------|-------------------|-------------------|

SHALLOW GAS

| Interval below KB | Remarks |
|-------------------|---------|
|-------------------|---------|

AVAILABLE LOGS

| Log type | Intervals |
|----------------|-----------------|
| AMS | 4288,0 - 4996,0 |
| AMS PLAYBACK | 4965,0 - 5265,0 |
| CBL VDL CCL GR | 4100,0 - 4443,0 |
| CDM SHDT | 4288,0 - 5268,0 |
| DIL LSS GR | 4935,0 - 5113,0 |
| DIL LSS SP GR | 4965,0 - 5265,0 |
| DIL SDT SP GR | 4288,0 - 4996,0 |

| Log type | Intervals | |
|----------------------|-----------|----------|
| DRILLING DATA PRESS. | 4294,0 | - 5264,0 |
| FMS GR | 4288,0 | - 5268,0 |
| LDL CNL GR | 4288,0 | - 4996,0 |
| LDL CNL GR | 4935,0 | - 5113,0 |
| LDL CNL GR | 4965,0 | - 5247,0 |
| MUD | 4294,0 | - 5264,0 |
| MWD | 4294,0 | - 4846,0 |
| RFT HP | 5014,0 | - 5044,0 |
| RFTB GR | 4331,0 | - 4810,0 |
| SHDT SGR AMS | 4289,0 | - 4998,0 |
| SYNTHETIC SEISMOGRAM | | |
| TWO-WAY TRAVEL TIME | 180,0 | - 5200,0 |
| WIRELINE DATA | 4294,0 | - 5264,0 |
| VSP | 2700,0 | - 5250,0 |

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

| Sub operation: | Minutes: | Hours: | % of total: |
|-----------------|--------------|--------------|---------------|
| BOP ACTIVITIES | 2910 | 48,5 | 6,47 |
| BOP/WELLHEAD EQ | 1590 | 26,5 | 3,53 |
| CASING | 1950 | 32,5 | 4,33 |
| CIRC/COND | 1800 | 30,0 | 4,00 |
| DRILL | 21120 | 352,0 | 46,93 |
| OTHER | 2010 | 33,5 | 4,47 |
| PRESS DETECTION | 30 | 0,5 | 0,07 |
| REAM | 930 | 15,5 | 2,07 |
| SURVEY | 330 | 5,5 | 0,73 |
| TRIP | 12330 | 205,5 | 27,40 |
| Total | 45000 | 750,0 | 100,00 |

Main operation: FORMATION EVAL

| Sub operation: | Minutes: | Hours: | % of total: |
|----------------|--------------|--------------|---------------|
| CIRC SAMPLES | 510 | 8,5 | 1,36 |
| CIRC/COND | 1500 | 25,0 | 3,99 |
| CORE | 2850 | 47,5 | 7,58 |
| DST | 16470 | 274,5 | 43,78 |
| LOG | 6990 | 116,5 | 18,58 |
| OTHER | 60 | 1,0 | 0,16 |
| RFT/FIT | 540 | 9,0 | 1,44 |
| TRIP | 8550 | 142,5 | 22,73 |
| WAIT | 150 | 2,5 | 0,40 |
| Total | 37620 | 627,0 | 100,00 |

Main operation: INTERRUPTION

| Sub operation: | Minutes: | Hours: | % of total: |
|----------------|-------------|--------------|---------------|
| MAINTAIN/REP | 5250 | 87,5 | 54,69 |
| OTHER | 1290 | 21,5 | 13,44 |
| WAIT | 1560 | 26,0 | 16,25 |
| WELL CONTROL | 1500 | 25,0 | 15,63 |
| Total | 9600 | 160,0 | 100,00 |

Main operation: MOVING

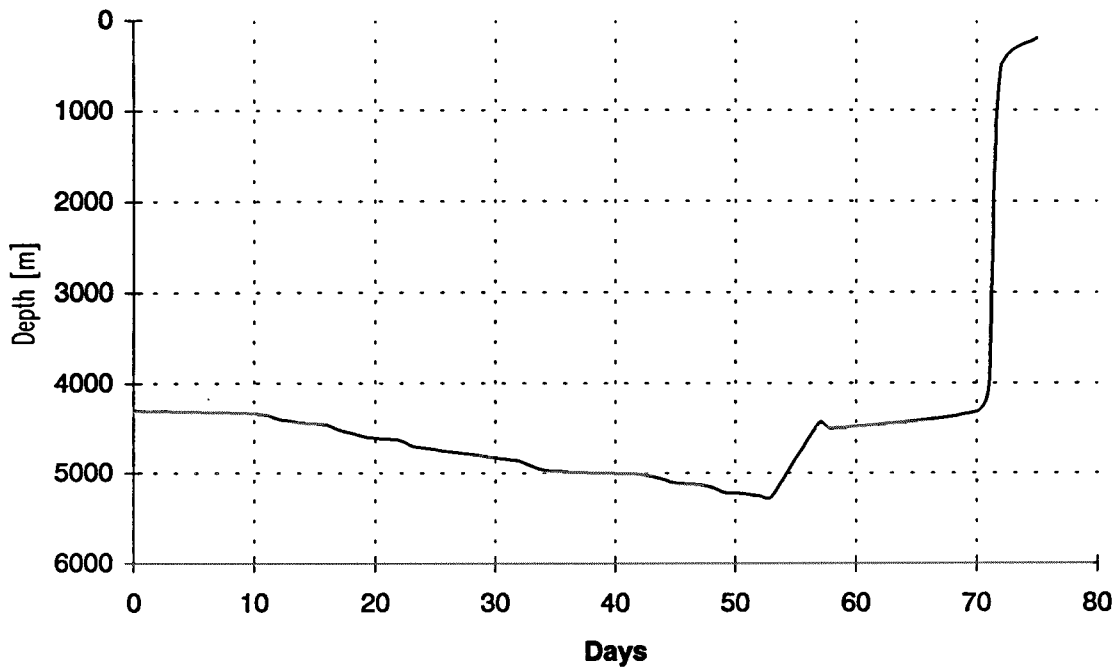
| Sub operation: | Minutes: | Hours: | % of total: |
|----------------|-------------|--------------|---------------|
| ANCHOR | 2160 | 36,0 | 27,38 |
| TRANSIT | 5730 | 95,5 | 72,62 |
| Total | 7890 | 131,5 | 100,00 |

Main operation: PLUG & ABANDON

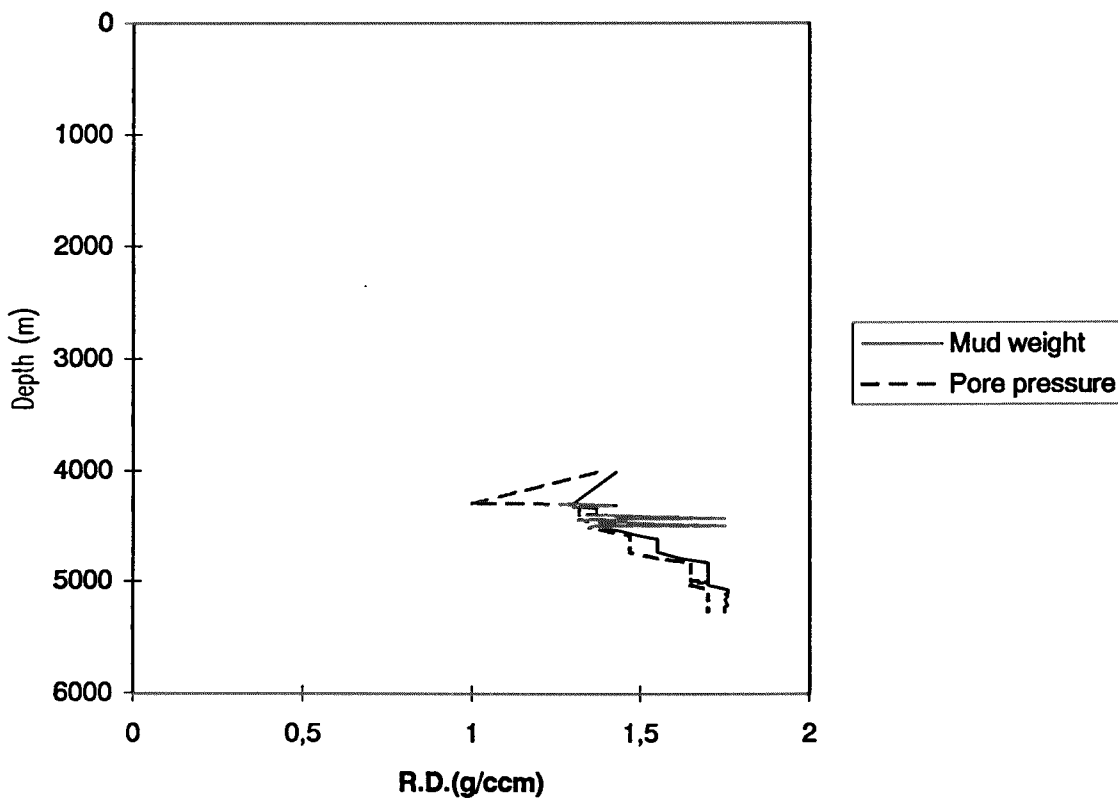
| Sub operation: | Minutes: | Hours: | % of total: |
|----------------|--------------|--------------|---------------|
| CEMENT PLUG | 960 | 16,0 | 9,58 |
| CIRC/COND | 840 | 14,0 | 8,38 |
| CUT | 930 | 15,5 | 9,28 |
| EQUIP RECOVERY | 2790 | 46,5 | 27,84 |
| OTHER | 240 | 4,0 | 2,40 |
| PERFORATE | 480 | 8,0 | 4,79 |
| SQUEEZE | 150 | 2,5 | 1,50 |
| TRIP | 3630 | 60,5 | 36,23 |
| Total | 10020 | 167,0 | 100,00 |

Total time used: Hours

Depth vs time for well: 6205/3-1 R



Composite plot for well: 6205/3-1 R



Well History 6205/3-1 R.

General:

Well 6205/3-1 R was designed to re-enter well 6205/3-1 that was drilled down to 4300 m RKB and temporary abandoned. A re-entry of the well and further drilling down to 5200 m RKB was planned carried out with the same rig, Mærsk Jutlander. The planned final depth of 5200 m RKB was anticipated to enter into the Båt Group of Early Jurassic. The main objective of the well was to prove oil in the Jurassic sandstones, and verify the structural and sedimentological interpretation of the area. The existence of high pressure in the Halten Area (well 6406/8-1) was taken into account when designing the casing programme, and in the choice of surface control equipment.

Operations:

Wildcat well 6205/3-1 R was spudded 20 September 1990 by the semi-submersible rig Mærsk Jutlander, and completed 30 November 1990 at a depth of 5264 m RKB in rock of Late Jurassic age, the Viking formation. Thinly developed Late Jurassic sandstones were encountered, which proved to be water bearing. A total of six cores were cut at different intervals from 4332 m RKB to 5264 m RKB. A total of 180 side wall cores were attempted and 83 were recovered. The well was permanently plugged and abandoned with hydrocarbon shows.

Testing:

One DST test was performed over the interval from 4324.1 - 4344.1 m RKB. Only water was produced during the test, but gas was brought to the surface when reversing out the tubing contents and samples were taken.

Geological Tops.

Well:6205/3-1 R.

| | Depth m (RKB). |
|--------------------|----------------|
| Cromer Knoll Group | 4200,0 |
| Åsgard Fm | 4200,0 |
| Viking Group | 4394,0 |
| Spekk Fm | 4394,0 |
| Rogn Fm | 4780,0 |
| Spekk Fm | 4846,0 |
| Rogn Fm | 4956,0 |
| Spekk Fm | 5047,0 |
| Melke Fm | 5221,0 |
| T.D. | 5264,0 |