

**General information**

|                                    |                                       |
|------------------------------------|---------------------------------------|
| Wellbore name                      | 6407/10-2                             |
| Type                               | EXPLORATION                           |
| Purpose                            | WILDCAT                               |
| Status                             | P&A                                   |
| Factmaps in new window             | <a href="#">link to map</a>           |
| Main area                          | NORWEGIAN SEA                         |
| Well name                          | 6407/10-2                             |
| Seismic location                   | NH 8604-808 LINE 270 COLUMN 8604-1420 |
| Production licence                 | <a href="#">132</a>                   |
| Drilling operator                  | Norsk Hydro Produksjon AS             |
| Drill permit                       | 633-L                                 |
| Drilling facility                  | <a href="#">VILDKAT EXPLORER</a>      |
| Drilling days                      | 52                                    |
| Entered date                       | 03.05.1990                            |
| Completed date                     | 23.06.1990                            |
| Release date                       | 23.06.1992                            |
| Publication date                   | 02.03.2004                            |
| Purpose - planned                  | WILDCAT                               |
| Reentry                            | NO                                    |
| Content                            | SHOWS                                 |
| Discovery wellbore                 | NO                                    |
| Kelly bushing elevation [m]        | 25.0                                  |
| Water depth [m]                    | 334.0                                 |
| Total depth (MD) [m RKB]           | 3825.0                                |
| Final vertical depth (TVD) [m RKB] | 3824.0                                |
| Maximum inclination [°]            | 4.5                                   |
| Bottom hole temperature [°C]       | 120                                   |
| Oldest penetrated age              | EARLY JURASSIC                        |
| Oldest penetrated formation        | TILJE FM                              |
| Geodetic datum                     | ED50                                  |
| NS degrees                         | 64° 13' 44.34" N                      |
| EW degrees                         | 7° 16' 54.02" E                       |
| NS UTM [m]                         | 7123832.87                            |
| EW UTM [m]                         | 416644.87                             |
| UTM zone                           | 32                                    |
| NPDID wellbore                     | 1497                                  |



## Wellbore history

### General

Well 6407/10-2 was drilled on the B-II structure south-east of the Njord Field, and is characterized by a prominent hanging wall anticline and syncline off the Trøndelag Platform and shows little tectonic disturbance as seen on seismic sections. From tectonic model inferred in the area, the tectonic damage to the reservoir rocks was expected to be less than previously encountered in the A-Central and the A-North areas. Movements along the main fault during the Late Jurassic caused sedimentation of Triassic and / or Middle and Early Jurassic clastics of delta fan type. Source rock for B-II area was prognosed to be the mature part of the Spekk Formation. Possible shallow gas might be present some 30 - 40 m below sea level. One core would be taken in each of the Garn, Ile and Tilje formations. The main objectives for the well were to assess the reservoir quality and hydrocarbon potential of the Garn, Ile, and Tilje Formations and the Late Jurassic sequence; to obtain reservoir pressure; confirm the seismic and geological model; and to assess the presence of sands in the Early Cretaceous sequence.

Prognosed TD was 3700 m in the upper part of the Tilje Formation, or alternatively 4040 m in Triassic rocks.

### Operations and results

Wildcat well 6407/10-2 was spudded with the semi-submersible rig Vildkat Explorer on 3 May 1990 and drilled to TD at 3825 m in the Early Jurassic Tilje Formation sandstones. The well was drilled with seawater and hi-vis pills down to 1070 m and with KCl/Polymer/Polyacrylamide mud system from 1070 m to TD. In the 17 1/2" section 1070 to 2188 m mud from a previous well was used, below 2188 m fresh mud was used. Apart from some difficulties during logging, drilling went on without any significant problems. No shallow gas was encountered in this well. Apart from 8 m Lysing sand at 2378 m there was no significant sand body development in the Cretaceous succession. The Garn Formation was not present in the well location. Hydrocarbons were absent in both the Ile- and Tilje formations. Weak to very weak shows were observed on claystones between 2660 m to 2720 m in the Lange Formation. Moderate to very weak shows were observed on claystones and sandstones throughout most of the Jurassic section. A total of 180 sidewall cores were attempted in three runs, and 104 were recovered. Two conventional cores were cut in the Ile- and Tilje formations. No fluid samples were taken. The well was permanently abandoned on 23 June 1990 as a dry well.

### Testing

No drill stem test was performed

## Cuttings at the Norwegian Offshore Directorate

| Cutting sample, top depth [m] | Cutting samples, bottom depth [m] |
|-------------------------------|-----------------------------------|
| 1080.00                       | 3825.00                           |

|                                  |     |
|----------------------------------|-----|
| Cuttings available for sampling? | YES |
|----------------------------------|-----|

**Cores at the Norwegian Offshore Directorate**

| Core sample number | Core sample - top depth | Core sample - bottom depth | Core sample depth - uom |
|--------------------|-------------------------|----------------------------|-------------------------|
| 1                  | 3446.0                  | 3457.2                     | [m ]                    |
| 2                  | 3682.0                  | 3694.0                     | [m ]                    |

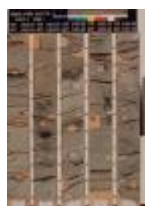
|                               |      |
|-------------------------------|------|
| Total core sample length [m]  | 23.2 |
| Cores available for sampling? | YES  |

**Core photos**


3442-3447m



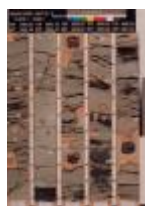
3447-3452m



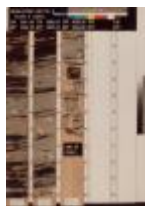
3452-3457m



3457-3686m



3686-3691m



3691-3693m

**Palynological slides at the Norwegian Offshore Directorate**

| Sample depth | Depth unit | Sample type | Laboratory |
|--------------|------------|-------------|------------|
| 1080.0       | [m]        | DC          | STRAT      |
| 1090.0       | [m]        | DC          | STRAT      |
| 1110.0       | [m]        | DC          | STRAT      |
| 1140.0       | [m]        | DC          | STRAT      |
| 1170.0       | [m]        | DC          | STRAT      |
| 1210.0       | [m]        | DC          | STRAT      |
| 1250.0       | [m]        | DC          | STRAT      |
| 1290.0       | [m]        | DC          | STRAT      |
| 1330.0       | [m]        | DC          | STRAT      |
| 1370.0       | [m]        | DC          | STRAT      |
| 1400.0       | [m]        | DC          | STRAT      |



|        |     |    |       |
|--------|-----|----|-------|
| 1440.0 | [m] | DC | STRAT |
| 1480.0 | [m] | DC | STRAT |
| 1520.0 | [m] | DC | STRAT |
| 1560.0 | [m] | DC | STRAT |
| 1620.0 | [m] | DC | HYDRO |
| 1630.0 | [m] | DC | HYDRO |
| 1640.0 | [m] | DC | STRAT |
| 1660.0 | [m] | DC | HYDRO |
| 1680.0 | [m] | DC | STRAT |
| 1720.0 | [m] | DC | STRAT |
| 1760.0 | [m] | DC | STRAT |
| 1800.0 | [m] | DC | STRAT |
| 1840.0 | [m] | DC | STRAT |
| 1860.0 | [m] | DC | HYDRO |
| 1880.0 | [m] | DC | STRAT |
| 1890.0 | [m] | DC | HYDRO |
| 1900.0 | [m] | DC | HYDRO |
| 1910.0 | [m] | DC | HYDRO |
| 1920.0 | [m] | DC | STRAT |
| 1960.0 | [m] | DC | STRAT |
| 2000.0 | [m] | DC | STRAT |
| 2040.0 | [m] | DC | STRAT |
| 2080.0 | [m] | DC | STRAT |
| 2120.0 | [m] | DC | STRAT |
| 2160.0 | [m] | DC | STRAT |
| 2200.0 | [m] | DC | STRAT |
| 2240.0 | [m] | DC | STRAT |
| 2280.0 | [m] | DC | STRAT |
| 2410.0 | [m] | DC | STRAT |
| 2430.0 | [m] | DC | STRAT |
| 2445.0 | [m] | DC | STRAT |
| 2455.0 | [m] | DC | STRAT |
| 2465.0 | [m] | DC | STRAT |
| 2495.0 | [m] | DC | STRAT |
| 2505.0 | [m] | DC | STRAT |
| 2515.0 | [m] | DC | STRAT |
| 2525.0 | [m] | DC | STRAT |
| 2555.0 | [m] | DC | STRAT |
| 2585.0 | [m] | DC | STRAT |
| 2595.0 | [m] | DC | STRAT |



|        |     |    |          |
|--------|-----|----|----------|
| 2605.0 | [m] | DC | STRAT    |
| 2615.0 | [m] | DC | STRAT    |
| 2635.0 | [m] | DC | STRAT    |
| 2675.0 | [m] | DC | STRAT    |
| 2685.0 | [m] | DC | STRAT    |
| 2695.0 | [m] | DC | STRAT    |
| 2705.0 | [m] | DC | STRAT    |
| 2715.0 | [m] | DC | STRAT    |
| 2735.0 | [m] | DC | STRAT    |
| 2745.0 | [m] | DC | STRAT    |
| 2755.0 | [m] | DC | STRAT    |
| 2765.0 | [m] | DC | STRAT    |
| 2775.0 | [m] | DC | STRAT    |
| 2795.0 | [m] | DC | STRAT    |
| 2805.0 | [m] | DC | STRAT    |
| 2815.0 | [m] | DC | STRAT    |
| 2822.0 | [m] | DC | PETROSTR |
| 2827.0 | [m] | DC | PETROS   |
| 2832.0 | [m] | DC | PETROS   |
| 2837.0 | [m] | DC | PETROS   |
| 2842.0 | [m] | DC | PETROS   |
| 2847.0 | [m] | DC | PETROS   |
| 2852.0 | [m] | DC | PETROS   |
| 2855.0 | [m] | DC | PETROS   |
| 2855.0 | [m] | DC | STRAT    |
| 2860.0 | [m] | DC | PETROSTR |
| 2865.0 | [m] | DC | PETROS   |
| 2870.0 | [m] | DC | PETROS   |
| 2875.0 | [m] | DC | PETROS   |
| 2880.0 | [m] | DC | PETROS   |
| 2885.0 | [m] | DC | PETROS   |
| 2885.0 | [m] | DC | STRAT    |
| 2890.0 | [m] | DC | PETROS   |
| 2895.0 | [m] | DC | PETROS   |
| 2895.0 | [m] | DC | STRAT    |
| 2900.0 | [m] | DC | PETROSTR |
| 2905.0 | [m] | DC | PETROS   |
| 2910.0 | [m] | DC | PETROS   |
| 2915.0 | [m] | DC | STRAT    |
| 2925.0 | [m] | DC | STRAT    |



|        |     |    |          |
|--------|-----|----|----------|
| 2930.0 | [m] | DC | STRAT    |
| 2930.0 | [m] | DC | PETROSTR |
| 2935.0 | [m] | DC | STRAT    |
| 2945.0 | [m] | DC | STRAT    |
| 2947.0 | [m] | DC | PETROSTR |
| 2955.0 | [m] | DC | STRAT    |
| 2965.0 | [m] | DC | STRAT    |
| 2965.0 | [m] | DC | PETROSTR |
| 2975.0 | [m] | DC | STRAT    |
| 2985.0 | [m] | DC | STRAT    |
| 2985.0 | [m] | DC | PETROSTR |
| 3015.0 | [m] | DC | STRAT    |
| 3025.0 | [m] | DC | STRAT    |
| 3035.0 | [m] | DC | STRAT    |
| 3045.0 | [m] | DC | STRAT    |
| 3055.0 | [m] | DC | STRAT    |
| 3085.0 | [m] | DC | STRAT    |
| 3105.0 | [m] | DC | STRAT    |
| 3140.0 | [m] | DC | STRAT    |
| 3150.0 | [m] | DC | STRAT    |
| 3160.0 | [m] | DC | STRAT    |
| 3180.0 | [m] | DC | STRAT    |
| 3200.0 | [m] | DC | STRAT    |
| 3220.0 | [m] | DC | STRAT    |
| 3250.0 | [m] | DC | STRAT    |
| 3280.0 | [m] | DC | STRAT    |
| 3290.0 | [m] | DC | STRAT    |
| 3300.0 | [m] | DC | STRAT    |
| 3310.0 | [m] | DC | STRAT    |
| 3340.0 | [m] | DC | STRAT    |
| 3360.0 | [m] | DC | HYDRO    |
| 3370.0 | [m] | DC | STRAT    |
| 3400.0 | [m] | DC | STRAT    |
| 3430.0 | [m] | DC | STRAT    |
| 3470.0 | [m] | DC | STRAT    |
| 3480.0 | [m] | DC | STRAT    |
| 3500.0 | [m] | DC | STRAT    |
| 3510.0 | [m] | DC | STRAT    |
| 3520.0 | [m] | DC | STRAT    |
| 3530.0 | [m] | DC | STRAT    |



|        |     |    |       |
|--------|-----|----|-------|
| 3540.0 | [m] | DC | STRAT |
| 3550.0 | [m] | DC | STRAT |
| 3560.0 | [m] | DC | STRAT |
| 3590.0 | [m] | DC | STRAT |
| 3610.0 | [m] | DC | STRAT |
| 3640.0 | [m] | DC | STRAT |
| 3660.0 | [m] | DC | STRAT |
| 3670.0 | [m] | DC | STRAT |
| 3700.0 | [m] | DC | STRAT |
| 3710.0 | [m] | DC | STRAT |
| 3720.0 | [m] | DC | STRAT |
| 3750.0 | [m] | DC | STRAT |
| 3770.0 | [m] | DC | STRAT |
| 3780.0 | [m] | DC | STRAT |
| 3800.0 | [m] | DC | STRAT |
| 3825.0 | [m] | DC | HYDRO |

**Lithostratigraphy**

| Top depth<br>[mMD RKB] | Lithostrat. unit                |
|------------------------|---------------------------------|
| 359                    | <a href="#">NORDLAND GP</a>     |
| 359                    | <a href="#">NAUST FM</a>        |
| 1009                   | <a href="#">KAI FM</a>          |
| 1105                   | <a href="#">HORDALAND GP</a>    |
| 1105                   | <a href="#">BRYGGE FM</a>       |
| 1627                   | <a href="#">ROGALAND GP</a>     |
| 1627                   | <a href="#">TARE FM</a>         |
| 1689                   | <a href="#">TANG FM</a>         |
| 1877                   | <a href="#">SHETLAND GP</a>     |
| 2378                   | <a href="#">CROMER KNOLL GP</a> |
| 2378                   | <a href="#">LYSING FM</a>       |
| 2386                   | <a href="#">LANGE FM</a>        |
| 2770                   | <a href="#">LYR FM</a>          |
| 2821                   | <a href="#">VIKING GP</a>       |
| 2821                   | <a href="#">SPEKK FM</a>        |
| 2830                   | <a href="#">ROGN FM</a>         |
| 2904                   | <a href="#">MELKE FM</a>        |
| 3327                   | <a href="#">FANGST GP</a>       |
| 3327                   | <a href="#">NOT FM</a>          |



|      |                          |
|------|--------------------------|
| 3436 | <a href="#">ILE FM</a>   |
| 3479 | <a href="#">BÅT GP</a>   |
| 3479 | <a href="#">ROR FM</a>   |
| 3679 | <a href="#">TILJE FM</a> |

**Composite logs**

| Document name        | Document format | Document size [MB] |
|----------------------|-----------------|--------------------|
| <a href="#">1497</a> | pdf             | 0.53               |

**Geochemical information**

| Document name          | Document format | Document size [MB] |
|------------------------|-----------------|--------------------|
| <a href="#">1497_1</a> | pdf             | 0.91               |

**Documents - older Norwegian Offshore Directorate WDSS reports and other related documents**

| Document name                                    | Document format | Document size [MB] |
|--------------------------------------------------|-----------------|--------------------|
| <a href="#">1497_01_WDSS_General_Information</a> | pdf             | 0.21               |
| <a href="#">1497_02_WDSS_completion_log</a>      | pdf             | 0.22               |

**Documents - reported by the production licence (period for duty of secrecy expired)**

| Document name                                            | Document format | Document size [MB] |
|----------------------------------------------------------|-----------------|--------------------|
| <a href="#">1497_6407_10_2_COMPLETION_REPORT_AND_LOG</a> | pdf             | 19.10              |

**Logs**

| Log type    | Log top depth [m] | Log bottom depth [m] |
|-------------|-------------------|----------------------|
| CBL VDL GR  | 1700              | 2163                 |
| CNL NGL AMS | 2163              | 3828                 |
| CST GR      | 2230              | 3010                 |





|                   |      |      |
|-------------------|------|------|
| CST GR            | 2230 | 3793 |
| CST GR            | 3025 | 3813 |
| DIL LDL SP GR     | 2163 | 3828 |
| DIL LSS LDL SP GR | 1054 | 2185 |
| FMS GR AMS        | 2163 | 3828 |
| LSS GR            | 0    | 0    |
| LSS GR            | 2163 | 3250 |
| MWD - GR RES DIR  | 359  | 3825 |
| RFT HP AMS        | 2383 | 3779 |
| SDT GR AMS        | 3030 | 3826 |
| VSP               | 2220 | 3810 |

**Casing and leak-off tests**

| Casing type | Casing diam.<br>[inch] | Casing depth<br>[m] | Hole diam.<br>[inch] | Hole depth<br>[m] | LOT/FIT mud<br>eqv.<br>[g/cm3] | Formation test<br>type |
|-------------|------------------------|---------------------|----------------------|-------------------|--------------------------------|------------------------|
| CONDUCTOR   | 30                     | 445.0               | 36                   | 447.0             | 0.00                           | LOT                    |
| INTERM.     | 20                     | 1056.0              | 26                   | 1070.0            | 1.95                           | LOT                    |
| INTERM.     | 13 3/8                 | 2164.0              | 17 1/2               | 2188.0            | 1.70                           | LOT                    |
| OPEN HOLE   |                        | 3825.0              | 12 1/4               | 3825.0            | 0.00                           | LOT                    |

**Drilling mud**

| Depth<br>MD [m] | Mud<br>weight<br>[g/cm3] | Visc.<br>[mPa.s] | Yield point<br>[Pa] | Mud type    | Date<br>measured |
|-----------------|--------------------------|------------------|---------------------|-------------|------------------|
| 397             | 1.07                     |                  |                     | WATER BASED | 03.05.1990       |
| 406             | 1.07                     |                  |                     | WATER BASED | 04.05.1990       |
| 443             | 1.07                     |                  |                     | WATER BASED | 10.05.1990       |
| 447             | 1.07                     |                  |                     | WATER BASED | 10.05.1990       |
| 448             | 1.07                     |                  |                     | WATER BASED | 10.05.1990       |
| 808             | 1.10                     |                  |                     | WATER BASED | 10.05.1990       |
| 1070            | 1.07                     |                  |                     | WATER BASED | 10.05.1990       |
| 1070            | 1.07                     |                  |                     | WATER BASED | 14.05.1990       |
| 1070            | 1.10                     |                  |                     | WATER BASED | 10.05.1990       |
| 1070            | 1.07                     |                  |                     | WATER BASED | 14.05.1990       |
| 1177            | 1.45                     | 11.0             | 8.0                 | WATER BASED | 14.05.1990       |
| 1364            | 1.60                     | 19.0             | 8.0                 | WATER BASED | 14.05.1990       |
| 1529            | 1.60                     | 25.0             | 8.0                 | WATER BASED | 15.05.1990       |
| 1656            | 1.60                     | 24.0             | 13.0                | WATER BASED | 16.05.1990       |



|      |      |      |      |             |            |
|------|------|------|------|-------------|------------|
| 1969 | 1.59 | 26.0 | 10.0 | WATER BASED | 21.05.1990 |
| 2040 | 1.32 | 17.0 | 10.0 | WATER BASED | 22.06.1990 |
| 2119 | 1.60 | 30.0 | 13.0 | WATER BASED | 21.05.1990 |
| 2168 | 1.60 | 25.0 | 11.0 | WATER BASED | 21.05.1990 |
| 2188 | 1.59 | 32.0 | 12.0 | WATER BASED | 21.05.1990 |
| 2188 | 1.59 | 31.0 | 9.0  | WATER BASED | 21.05.1990 |
| 2191 | 1.38 | 27.0 | 10.0 | WATER BASED | 22.05.1990 |
| 2435 | 1.38 | 25.0 | 10.0 | WATER BASED | 23.05.1990 |
| 2590 | 1.38 | 23.0 | 11.0 | WATER BASED | 25.05.1990 |
| 2656 | 1.39 | 18.0 | 10.0 | WATER BASED | 25.05.1990 |
| 2768 | 1.38 | 26.0 | 8.0  | WATER BASED | 28.05.1990 |
| 2853 | 1.38 | 21.0 | 10.0 | WATER BASED | 28.05.1990 |
| 2887 | 1.38 | 17.0 | 10.0 | WATER BASED | 28.05.1990 |
| 2960 | 1.38 | 28.0 | 10.0 | WATER BASED | 29.05.1990 |
| 3033 | 1.38 | 21.0 | 7.0  | WATER BASED | 30.05.1990 |
| 3164 | 1.38 | 27.0 | 7.0  | WATER BASED | 31.05.1990 |
| 3202 | 1.38 | 21.0 | 10.0 | WATER BASED | 05.06.1990 |
| 3252 | 1.38 | 20.0 | 10.0 | WATER BASED | 05.06.1990 |
| 3305 | 1.38 | 25.0 | 12.0 | WATER BASED | 05.06.1990 |
| 3357 | 1.38 | 24.0 | 10.0 | WATER BASED | 05.06.1990 |
| 3370 | 1.32 | 17.0 | 10.0 | WATER BASED | 21.06.1990 |
| 3411 | 1.38 | 22.0 | 11.0 | WATER BASED | 05.06.1990 |
| 3442 | 1.38 | 14.0 | 10.0 | WATER BASED | 06.06.1990 |
| 3458 | 1.38 | 23.0 | 13.0 | WATER BASED | 07.06.1990 |
| 3509 | 1.38 | 20.0 | 10.0 | WATER BASED | 08.06.1990 |
| 3553 | 1.38 | 20.0 | 10.0 | WATER BASED | 11.06.1990 |
| 3587 | 1.38 | 22.0 | 12.0 | WATER BASED | 11.06.1990 |
| 3641 | 1.38 | 20.0 | 13.0 | WATER BASED | 11.06.1990 |
| 3664 | 1.38 | 22.0 | 12.0 | WATER BASED | 12.06.1990 |
| 3682 | 1.38 | 22.0 | 12.0 | WATER BASED | 13.06.1990 |
| 3700 | 1.38 | 20.0 | 12.0 | WATER BASED | 14.06.1990 |
| 3806 | 1.38 | 19.0 | 14.0 | WATER BASED | 14.06.1990 |
| 3825 | 1.38 | 19.0 | 14.0 | WATER BASED | 18.06.1990 |
| 3825 | 1.32 | 17.0 | 10.0 | WATER BASED | 18.06.1990 |
| 3825 | 1.38 | 19.0 | 14.0 | WATER BASED | 18.06.1990 |
| 3825 | 1.32 | 17.0 | 10.0 | WATER BASED | 19.06.1990 |
| 3825 | 1.32 | 17.0 | 10.0 | WATER BASED | 20.06.1990 |

**Pressure plots**





The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

| Document name                                             | Document format | Document size [MB] |
|-----------------------------------------------------------|-----------------|--------------------|
| <a href="#">1497 Formation pressure (Formasjonstrykk)</a> | pdf             | 0.24               |

