

**General information**

|                                    |                               |
|------------------------------------|-------------------------------|
| Wellbore name                      | 34/7-2                        |
| Type                               | EXPLORATION                   |
| Purpose                            | WILDCAT                       |
| Status                             | P&A                           |
| Factmaps in new window             | <a href="#">link to map</a>   |
| Main area                          | NORTH SEA                     |
| Well name                          | 34/7-2                        |
| Seismic location                   | SG 8231 - 106 SP. 287         |
| Production licence                 | <a href="#">089</a>           |
| Drilling operator                  | Saga Petroleum ASA            |
| Drill permit                       | 424-L                         |
| Drilling facility                  | <a href="#">TREASURE SAGA</a> |
| Drilling days                      | 39                            |
| Entered date                       | 02.09.1984                    |
| Completed date                     | 10.10.1984                    |
| Release date                       | 10.10.1986                    |
| Publication date                   | 26.10.2009                    |
| Purpose - planned                  | WILDCAT                       |
| Reentry                            | NO                            |
| Content                            | DRY                           |
| Discovery wellbore                 | NO                            |
| Kelly bushing elevation [m]        | 26.0                          |
| Water depth [m]                    | 245.0                         |
| Total depth (MD) [m RKB]           | 2475.0                        |
| Final vertical depth (TVD) [m RKB] | 2475.0                        |
| Maximum inclination [°]            | 1.75                          |
| Bottom hole temperature [°C]       | 92                            |
| Oldest penetrated age              | LATE TRIASSIC                 |
| Oldest penetrated formation        | LUNDE FM                      |
| Geodetic datum                     | ED50                          |
| NS degrees                         | 61° 17' 57.16" N              |
| EW degrees                         | 2° 9' 40.9" E                 |
| NS UTM [m]                         | 6796565.81                    |
| EW UTM [m]                         | 455067.40                     |
| UTM zone                           | 31                            |
| NPDID wellbore                     | 233                           |



## Wellbore history

### General

Well 34/7-2 was drilled just north of the Tordis Øst discovery in the northern North Sea. The main objectives were to test for hydrocarbons in the Jurassic Statfjord Formation and in the Triassic Lunde Formation.

### Operations and results

Wildcat well 34/7-2 was spudded with the semi-submersible installation Treasure Saga on 2 September 1984 and drilled to TD at 2475 m in the Late Triassic Lunde Formation. A total of 83 hours rig time was NPT due to repairs resulting from a failed RIH with the 26" bit after underreaming to 816 m, and a leak in the acoustic system discovered after setting the 9 5/8" casing at 2031 m. The well was drilled with seawater and hi-vis pills down to 848 m, with KCl/polymer mud from 848 m to 2042 m, and with lignosulfonate mud from 2042 m to TD. No shallow gas was encountered.

Except for the sandy Utsira Formation and two sandstone units in the Hordaland Group (in the order of 40 - 50 m each) the well proved mainly claystones down to the Statfjord Formation at 2152 m. At BCU (2085 m) there was a major hiatus from Pliensbachian to Campanian. The Lunde Formation was encountered at 2271 m. The gross thickness of the Statfjord in this well is 119 m with 43.5 m of net sand. The well drilled some 204 m into the Lunde Formation, which in the upper part proved a siltstone sequence with minor sandstone and claystone, while the lowermost 117 m proved a sequence of sandstones alternating with claystones. Of this sequence some 41.3 m could be considered as net. No live hydrocarbons were encountered by the well. Residual oil was found in base Amundsen - top Statfjord Formations, however, cores showed low porosity and essentially no net sand. Extraction data from geochemical analyses also indicate migrated hydrocarbons in the Shetland Group.

Three cores totalling 28.8 m (recovered 22 m, 76% recovery) were cut across the stratigraphic border zone between Amundsen Formation (Dunlin Group) and Upper Statfjord Formation. The FMT tool was run to acquire pressure data and one FMT fluid sample was taken at 2110.5 m. It recovered only mud filtrate.

The well was permanently abandoned on 10 October 1984 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] |
|-------------------------------|-----------------------------------|
| 420.00                        | 2475.00                           |

|                                  |     |
|----------------------------------|-----|
| 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                  | 2147.3                  | 2160.2                     | [m ]                    |
| 2                  | 2161.6                  | 2164.0                     | [m ]                    |
| 3                  | 2168.6                  | 2175.8                     | [m ]                    |

|                               |      |
|-------------------------------|------|
| Total core sample length [m]  | 22.5 |
| Cores available for sampling? | YES  |

**Core photos**


2147-2153m



2153-2158m



2159-2160m



2161-2164m



2168-2174m



2174-2175m

**Palynological slides at the Norwegian Offshore Directorate**

| Sample depth | Depth unit | Sample type | Laboratory |
|--------------|------------|-------------|------------|
| 1048.0       | [m]        | SWC         | RRI        |
| 1084.0       | [m]        | SWC         | RRI        |
| 1138.0       | [m]        | SWC         | RRI        |
| 1157.0       | [m]        | SWC         | RRI        |
| 1192.0       | [m]        | SWC         | RRI        |
| 1227.0       | [m]        | SWC         | RRI        |
| 1287.0       | [m]        | SWC         | RRI        |
| 1336.5       | [m]        | SWC         | RRI        |
| 1426.0       | [m]        | SWC         | RRI        |
| 1480.0       | [m]        | SWC         | RRI        |
| 1560.0       | [m]        | DC          | RRI        |



|        |     |     |     |
|--------|-----|-----|-----|
| 1580.0 | [m] | DC  | RRI |
| 1595.0 | [m] | SWC | RRI |
| 1610.0 | [m] | DC  | RRI |
| 1615.0 | [m] | SWC | RRI |
| 1620.0 | [m] | DC  | RRI |
| 1650.0 | [m] | SWC | RRI |
| 1680.0 | [m] | DC  | RRI |
| 1710.0 | [m] | DC  | RRI |
| 1730.0 | [m] | DC  | RRI |
| 1745.0 | [m] | SWC | RRI |
| 1784.0 | [m] | DC  | RRI |
| 1814.0 | [m] | DC  | RRI |
| 1844.0 | [m] | DC  | RRI |
| 1863.0 | [m] | SWC | RRI |
| 1874.0 | [m] | DC  | RRI |
| 1887.0 | [m] | SWC | RRI |
| 1905.0 | [m] | SWC | RRI |
| 1919.0 | [m] | DC  | RRI |
| 1940.0 | [m] | SWC | RRI |
| 1953.0 | [m] | SWC | RRI |
| 1967.0 | [m] | DC  | RRI |
| 1979.0 | [m] | DC  | RRI |
| 1998.0 | [m] | SWC | RRI |
| 2010.0 | [m] | SWC | RRI |
| 2025.0 | [m] | SWC | RRI |
| 2039.0 | [m] | DC  | RRI |
| 2040.0 | [m] | SWC | RRI |
| 2054.0 | [m] | DC  | RRI |
| 2060.0 | [m] | SWC | RRI |
| 2069.0 | [m] | DC  | RRI |
| 2077.5 | [m] | SWC | RRI |
| 2083.0 | [m] | SWC | RRI |
| 2084.0 | [m] | DC  | RRI |
| 2099.0 | [m] | DC  | RRI |
| 2114.0 | [m] | DC  | RRI |
| 2127.0 | [m] | SWC | RRI |
| 2129.0 | [m] | DC  | RRI |
| 2143.0 | [m] | SWC | RRI |
| 2144.0 | [m] | DC  | RRI |
| 2148.7 | [m] | C   | RRI |



|        |     |     |     |
|--------|-----|-----|-----|
| 2154.9 | [m] | C   | RRI |
| 2162.8 | [m] | C   | RRI |
| 2168.3 | [m] | SWC | RRI |
| 2189.0 | [m] | DC  | RRI |
| 2193.0 | [m] | SWC | RRI |
| 2204.0 | [m] | DC  | RRI |
| 2208.5 | [m] | SWC | RRI |
| 2300.0 | [m] | DC  | RRI |
| 2340.0 | [m] | DC  | RRI |
| 2360.0 | [m] | DC  | RRI |
| 2420.0 | [m] | DC  | RRI |

**Lithostratigraphy**

| Top depth<br>[mMD RKB] | Lithostrat. unit               |
|------------------------|--------------------------------|
| 271                    | <a href="#">NORDLAND GP</a>    |
| 1026                   | <a href="#">UTSIRA FM</a>      |
| 1035                   | <a href="#">HORDALAND GP</a>   |
| 1227                   | <a href="#">NO FORMAL NAME</a> |
| 1282                   | <a href="#">NO FORMAL NAME</a> |
| 1375                   | <a href="#">NO FORMAL NAME</a> |
| 1415                   | <a href="#">NO FORMAL NAME</a> |
| 1640                   | <a href="#">ROGALAND GP</a>    |
| 1640                   | <a href="#">BALDER FM</a>      |
| 1647                   | <a href="#">LISTA FM</a>       |
| 1757                   | <a href="#">SHETLAND GP</a>    |
| 1757                   | <a href="#">JORSALFARE FM</a>  |
| 1842                   | <a href="#">KYRRE FM</a>       |
| 2085                   | <a href="#">DUNLIN GP</a>      |
| 2085                   | <a href="#">AMUNDSEN FM</a>    |
| 2152                   | <a href="#">STATFJORD GP</a>   |
| 2271                   | <a href="#">HEGRE GP</a>       |
| 2271                   | <a href="#">LUNDE FM</a>       |

**Geochemical information**

| Document name         | Document<br>format | Document size<br>[MB] |
|-----------------------|--------------------|-----------------------|
| <a href="#">233_1</a> | pdf                | 0.33                  |





|                       |     |      |
|-----------------------|-----|------|
| <a href="#">233 2</a> | pdf | 4.85 |
|-----------------------|-----|------|

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

| Document name                                   | Document format | Document size [MB] |
|-------------------------------------------------|-----------------|--------------------|
| <a href="#">233 01 WDSS General Information</a> | pdf             | 0.21               |
| <a href="#">233 02 WDSS completion log</a>      | pdf             | 0.23               |

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

| Document name                                           | Document format | Document size [MB] |
|---------------------------------------------------------|-----------------|--------------------|
| <a href="#">233 01 34 7 2 Completion Report and Log</a> | pdf             | 13.04              |

### Logs

| Log type    | Log top depth [m] | Log bottom depth [m] |
|-------------|-------------------|----------------------|
| BHC GR      | 2120              | 2472                 |
| CALI        | 394               | 850                  |
| CALI        | 848               | 1524                 |
| CALI        | 848               | 1539                 |
| CALI        | 1550              | 2040                 |
| CALI        | 1553              | 2041                 |
| CDL CNL GR  | 2032              | 2468                 |
| CDL DNL GR  | 2120              | 2468                 |
| CDL GR      | 484               | 1559                 |
| CDL GR      | 1550              | 2038                 |
| COREGUN     | 415               | 845                  |
| COREGUN     | 865               | 1557                 |
| COREGUN     | 1560              | 2025                 |
| COREGUN     | 1720              | 2470                 |
| DIFL BHC GR | 394               | 860                  |
| DIFL BHC GR | 848               | 1565                 |
| DIFL BHC GR | 1550              | 2041                 |
| DIFL BHC GR | 2032              | 2176                 |
| DIFL BHC GR | 2032              | 2473                 |
| DIPLOG      | 2032              | 2471                 |





|            |      |      |
|------------|------|------|
| DL LMLL GR | 2120 | 2473 |
| FMT        | 2138 | 2458 |
| FMT        | 2152 | 2171 |
| GR         | 0    | 397  |
| SL         | 2032 | 2463 |
| VELOCITY   | 272  | 2473 |

**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                     | 394.0               | 36                   | 684.0             | 0.00                           | LOT                    |
| SURF.COND.  | 20                     | 848.0               | 26                   | 861.0             | 1.58                           | LOT                    |
| INTERM.     | 13 3/8                 | 1549.0              | 17 1/2               | 1570.0            | 1.69                           | LOT                    |
| INTERM.     | 9 5/8                  | 2031.0              | 12 1/4               | 2042.0            | 1.88                           | LOT                    |
| OPEN HOLE   |                        | 2475.0              | 8 1/2                | 2475.0            | 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 |
|-----------------|--------------------------|------------------|---------------------|-------------|------------------|
| 330             | 1.05                     | 100.0            | 20.0                | WATER BASED | 03.09.1984       |
| 397             | 1.05                     | 100.0            | 20.0                | WATER BASED | 06.09.1984       |
| 412             | 1.05                     | 100.0            | 20.0                | WATER BASED | 06.09.1984       |
| 684             | 1.10                     | 100.0            | 20.0                | WATER BASED | 06.09.1984       |
| 861             | 1.13                     | 15.0             | 25.0                | WATER BASED | 10.09.1984       |
| 861             | 1.16                     | 15.0             | 30.0                | WATER BASED | 12.09.1984       |
| 861             | 1.16                     | 10.0             | 41.0                | WATER BASED | 10.09.1984       |
| 861             | 1.16                     | 15.0             | 30.0                | WATER BASED | 12.09.1984       |
| 861             | 1.16                     | 10.0             | 41.0                | WATER BASED | 10.09.1984       |
| 1565            | 1.37                     | 41.0             | 21.0                | WATER BASED | 17.09.1984       |
| 1565            | 1.22                     | 16.0             | 21.0                | WATER BASED | 16.09.1984       |
| 1565            | 1.37                     | 41.0             | 21.0                | WATER BASED | 17.09.1984       |
| 1570            | 1.44                     | 42.0             | 24.0                | WATER BASED | 20.09.1984       |
| 1766            | 1.50                     | 46.0             | 20.0                | WATER BASED | 25.09.1984       |
| 2025            | 1.59                     | 46.0             | 20.0                | WATER BASED | 25.09.1984       |
| 2042            | 1.59                     | 47.0             | 16.0                | WATER BASED | 25.09.1984       |
| 2042            | 1.59                     | 47.0             | 16.0                | WATER BASED | 25.09.1984       |
| 2042            | 1.59                     | 50.0             | 20.0                | WATER BASED | 25.09.1984       |



|      |      |      |      |             |            |
|------|------|------|------|-------------|------------|
| 2148 | 1.80 | 55.0 | 12.0 | WATER BASED | 29.09.1984 |
| 2169 | 1.80 | 55.0 | 18.0 | WATER BASED | 01.10.1984 |
| 2177 | 1.80 | 55.0 | 17.0 | WATER BASED | 01.10.1984 |
| 2242 | 1.72 | 50.0 | 14.0 | WATER BASED | 01.10.1984 |
| 2313 | 1.71 | 50.0 | 16.0 | WATER BASED | 01.10.1984 |
| 2410 | 1.71 | 50.0 | 16.0 | WATER BASED | 03.10.1984 |
| 2475 | 1.71 | 45.0 | 15.0 | WATER BASED | 03.10.1984 |
| 2475 | 1.71 | 44.0 | 14.0 | WATER BASED | 04.10.1984 |
| 2475 | 1.71 | 45.0 | 12.0 | WATER BASED | 07.10.1984 |
| 2475 | 1.71 | 51.0 | 13.0 | WATER BASED | 07.10.1984 |
| 2475 | 1.71 | 44.0 | 14.0 | WATER BASED | 04.10.1984 |
| 2475 | 1.71 | 51.0 | 13.0 | WATER BASED | 07.10.1984 |
| 2475 | 1.71 | 45.0 | 12.0 | WATER BASED | 07.10.1984 |

**Thin sections at the Norwegian Offshore Directorate**

| Depth   | Unit |
|---------|------|
| 4512.80 | [m ] |
| 4514.70 | [m ] |
| 4516.35 | [m ] |
| 4518.90 | [m ] |

**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="#">233 Formation pressure (Formasjonstrykk)</a> | pdf             | 0.21               |

