

**General information**

|                                    |                                                  |
|------------------------------------|--------------------------------------------------|
| Wellbore name                      | 35/7-1 S                                         |
| Type                               | EXPLORATION                                      |
| Purpose                            | WILDCAT                                          |
| Status                             | P&A                                              |
| Press release                      | <a href="#">link to press release</a>            |
| Factmaps in new window             | <a href="#">link to map</a>                      |
| Main area                          | NORTH SEA                                        |
| Well name                          | 35/7-1                                           |
| Seismic location                   | Survey:MC3DMF367-R08-inline3014 & crossline 6288 |
| Production licence                 | <a href="#">377 S</a>                            |
| Drilling operator                  | Idemitsu Petroleum Norge AS                      |
| Drill permit                       | 1356-L                                           |
| Drilling facility                  | <a href="#">AKER BARENTS</a>                     |
| Drilling days                      | 95                                               |
| Entered date                       | 13.05.2011                                       |
| Completed date                     | 15.08.2011                                       |
| Release date                       | 15.08.2013                                       |
| Publication date                   | 15.08.2013                                       |
| Purpose - planned                  | WILDCAT                                          |
| Reentry                            | NO                                               |
| Content                            | DRY                                              |
| Discovery wellbore                 | NO                                               |
| Kelly bushing elevation [m]        | 40.0                                             |
| Water depth [m]                    | 386.0                                            |
| Total depth (MD) [m RKB]           | 4825.0                                           |
| Final vertical depth (TVD) [m RKB] | 4813.0                                           |
| Maximum inclination [°]            | 9.2                                              |
| Bottom hole temperature [°C]       | 168                                              |
| Oldest penetrated age              | EARLY JURASSIC                                   |
| Oldest penetrated formation        | AMUNDSEN FM                                      |
| Geodetic datum                     | ED50                                             |
| NS degrees                         | 61° 21' 38.86" N                                 |
| EW degrees                         | 3° 13' 11.73" E                                  |
| NS UTM [m]                         | 6803157.24                                       |
| EW UTM [m]                         | 511760.25                                        |
| UTM zone                           | 31                                               |
| NPDID wellbore                     | 6599                                             |

**Wellbore history****General**

Well 35/7-1 S was drilled on the Apollon prospect on the Marflo Spur, west of the Vega Field in the Northern North Sea. The main objective for the well was to test the hydrocarbon potential in Tarbert, Ness and Etive formations sandstones of the Middle Jurassic Brent Group. The secondary objective was to prove hydrocarbons in the Lower Jurassic Cook Formation within the Dunlin Group. The well was designed with an S-shaped path to avoid a possible gas charged sand.

**Operations and results**

Well 35/7-1 S was spudded with the semi-submersible installation Aker Barents on 13 May 2011. A 9-7/8" pilot hole was drilled below the 30" casing shoe to section TD at 1414 m to check for shallow gas. No shallow gas was recorded. Severe mud losses were experienced when drilling the 17-1/2" section in the transition from Balder to Sele formations at 1855 m. Decision was made to plug back the existing 17-1/2" section and sidetrack the well from below the 20" casing shoe, at 1425 m. When the 12 1/4" section was drilled to just above prognosed section TD, an influx of 400 l was reported and the well shut-in. The well kill with 10 SPM was performed and was successful. This was however an extremely slow rate to kill such a long well and required an extensive amount of time. After the well kill, the 9 7/8" casing was run and cemented and the 35/7-1 ST2 technical sidetrack was drilled on without significant problems to TD at 4825 in the Early Jurassic Amundsen Formation. The well was drilled with seawater and hi-vis pills down to 511 m, with Glydril/KCl mud from 511 m to 1414 m in the primary well and to 1417 m in the sidetrack, with Versatec oil based mud from 1417 m to 3736 m and with Versatherm OBM from 3736 m to TD.

All stratigraphic tops for the well were encountered within the given depth uncertainty. Top Brent Group was encountered at 4293 m, 18 m shallower than prognosed; and top Cook Formation at 4669 m, 12.5 m deeper than prognosed. No producible hydrocarbons were encountered in the target Brent Group and Dunlin Formation sandstones. No oil shows were reported from the well.

No cores were cut, and a dry hole wire line program was executed. No wire line fluid samples were taken.

The well was permanently abandoned on 15 August 2011 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] |
|-------------------------------|-----------------------------------|
| 520.00                        | 1820.00                           |

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

**Lithostratigraphy**

| Top depth<br>[mMD RKB] | Lithostrat. unit                |
|------------------------|---------------------------------|
| 426                    | <a href="#">NORDLAND GP</a>     |
| 933                    | <a href="#">UTSIRA FM</a>       |
| 1062                   | <a href="#">HORDALAND GP</a>    |
| 1173                   | <a href="#">SKADE FM</a>        |
| 1514                   | <a href="#">GRID FM</a>         |
| 1780                   | <a href="#">ROGALAND GP</a>     |
| 1780                   | <a href="#">BALDER FM</a>       |
| 1840                   | <a href="#">SELE FM</a>         |
| 1860                   | <a href="#">LISTA FM</a>        |
| 1977                   | <a href="#">VÅLE FM</a>         |
| 1991                   | <a href="#">SHETLAND GP</a>     |
| 1991                   | <a href="#">JORSALFARE FM</a>   |
| 2203                   | <a href="#">KYRRE FM</a>        |
| 3360                   | <a href="#">TRYGGVASON FM</a>   |
| 3586                   | <a href="#">BLODØKS FM</a>      |
| 3651                   | <a href="#">SVARTE FM</a>       |
| 3726                   | <a href="#">CROMER KNOLL GP</a> |
| 3726                   | <a href="#">RØDBY FM</a>        |
| 3814                   | <a href="#">SOLA FM</a>         |
| 3850                   | <a href="#">ÅSGARD FM</a>       |
| 3924                   | <a href="#">VIKING GP</a>       |
| 3924                   | <a href="#">DRAUPNE FM</a>      |
| 3974                   | <a href="#">HEATHER FM</a>      |
| 4293                   | <a href="#">BRENT GP</a>        |
| 4293                   | <a href="#">TARBERT FM</a>      |
| 4340                   | <a href="#">NESS FM</a>         |
| 4409                   | <a href="#">ETIVE FM</a>        |
| 4454                   | <a href="#">RANNOCH FM</a>      |
| 4515                   | <a href="#">DUNLIN GP</a>       |
| 4515                   | <a href="#">DRAKE FM</a>        |
| 4669                   | <a href="#">COOK FM</a>         |
| 4771                   | <a href="#">BURTON FM</a>       |
| 4782                   | <a href="#">AMUNDSEN FM</a>     |

**Logs**



| Log type                   | Log top depth [m] | Log bottom depth [m] |
|----------------------------|-------------------|----------------------|
| LDS APS HNGS GR LEHQT      | 3850              | 4825                 |
| MSCT GR LEH                | 3919              | 4478                 |
| MWD - ARCVIS SONVIS        | 512               | 2904                 |
| MWD - DI PWD               | 426               | 1414                 |
| MWD - GVR ECOS SONVIS      | 4340              | 4825                 |
| MWD - GVR STET ECOS SONVIS | 3893              | 4340                 |
| MWD - PD ARCVIS SONVIS     | 2904              | 3893                 |
| QAIT IS PPC MSIP GR LIH    | 3780              | 4825                 |
| XPTH EDTC LEH              | 4294              | 4748                 |

**Casing and leak-off tests**

| Casing type | Casing diam. [inch] | Casing depth [m] | Hole diam. [inch] | Hole depth [m] | LOT/FIT mud eqv. [g/cm3] | Formation test type |
|-------------|---------------------|------------------|-------------------|----------------|--------------------------|---------------------|
| CONDUCTOR   | 30                  | 511.0            | 36                | 512.0          | 0.00                     | LOT                 |
| SURF.COND.  | 20                  | 1408.0           | 26                | 1414.0         | 1.60                     | LOT                 |
| PILOT HOLE  |                     | 1414.0           | 9 7/8             | 1414.0         | 0.00                     | LOT                 |
| INTERM.     | 13 3/8              | 2897.0           | 17 1/2            | 2904.0         | 1.76                     | LOT                 |
| INTERM.     | 9 5/8               | 3887.0           | 12 1/4            | 3893.0         | 1.95                     | LOT                 |
| OPEN HOLE   |                     | 4825.0           | 8 1/2             | 4825.0         | 0.00                     | LOT                 |

**Drilling mud**

| Depth MD [m] | Mud weight [g/cm3] | Visc. [mPa.s] | Yield point [Pa] | Mud type   | Date measured |
|--------------|--------------------|---------------|------------------|------------|---------------|
| 521          | 1.17               | 14.0          |                  | Glydril    |               |
| 835          | 1.21               | 15.0          |                  | Glydril    |               |
| 1414         | 1.29               | 16.0          |                  | Glydril    |               |
| 1463         | 1.49               | 43.0          |                  | Versatec   |               |
| 1855         | 1.34               | 30.0          |                  | Versatec   |               |
| 2373         | 1.37               | 28.0          |                  | Versatherm |               |
| 2904         | 1.37               | 35.0          |                  | Versatec   |               |
| 3435         | 1.70               | 40.0          |                  | Versatherm |               |
| 3893         | 1.67               | 49.0          |                  | Versatec   |               |
| 4298         | 1.80               | 45.0          |                  | Versatherm |               |
| 4646         | 1.80               | 47.0          |                  | Versatherm |               |
| 4825         | 1.80               | 47.0          |                  | Versatherm |               |

