

**General information**

|                                    |                                            |
|------------------------------------|--------------------------------------------|
| Wellbore name                      | 6507/11-11                                 |
| 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                          | NORWEGIAN SEA                              |
| Well name                          | 6507/11-11                                 |
| Seismic location                   | MC3D-HVG2011-BIN :inline 3113 & xline 2989 |
| Production licence                 | <a href="#">591</a>                        |
| Drilling operator                  | Tullow Oil Norge AS                        |
| Drill permit                       | 1574-L                                     |
| Drilling facility                  | <a href="#">LEIV EIRIKSSON</a>             |
| Drilling days                      | 36                                         |
| Entered date                       | 27.05.2015                                 |
| Completed date                     | 01.07.2015                                 |
| Release date                       | 01.07.2017                                 |
| Publication date                   | 01.07.2017                                 |
| Purpose - planned                  | WILDCAT                                    |
| Reentry                            | NO                                         |
| Content                            | DRY                                        |
| Discovery wellbore                 | NO                                         |
| Kelly bushing elevation [m]        | 25.0                                       |
| Water depth [m]                    | 271.0                                      |
| Total depth (MD) [m RKB]           | 2900.0                                     |
| Final vertical depth (TVD) [m RKB] | 2900.0                                     |
| Maximum inclination [°]            | 2.3                                        |
| Oldest penetrated age              | MIDDLE JURASSIC                            |
| Oldest penetrated formation        | NOT FM                                     |
| Geodetic datum                     | ED50                                       |
| NS degrees                         | 65° 14' 15.9" N                            |
| EW degrees                         | 7° 30' 39.4" E                             |
| NS UTM [m]                         | 7235954.48                                 |
| EW UTM [m]                         | 430407.36                                  |
| UTM zone                           | 32                                         |
| NPDID wellbore                     | 7697                                       |



## Wellbore history

### General

Well 6507/11-11 was drilled to test the Zumba prospect in the Grinda Graben in the Norwegian Sea. The primary objective was to test the hydrocarbon potential in the Late Jurassic Rogn Formation. The secondary objective was to prove petroleum in the Middle Jurassic Garn formation.

### Operations and results

Wildcat well 6507/11-11 was spudded with the semi-submersible installation Leiv Eiriksson on 27 May 2015 and drilled to TD at 2900 m in the Middle Jurassic Not Formation. Pilot holes were drilled in the top sections down to 501 m to check for shallow gas. No shallow gas was observed. No significant problem was encountered in the operations. The well was drilled with KCl/polymer mud down to 504 m and with EMS-4400 oil based mud from 504 m to TD.

The Spekk Formation was penetrated from 2604 to 2713 m. It consisted of carbonaceous claystone with limestone stringers. Geochemical analyses proved 7-10% TOC and pre-oil window maturity all through. The target Rogn Formation sandstone was not observed, only traces of sandstone was observed in cuttings below 2695 m. The Garn Formation came in at 2845 m and was water-wet. No hydrocarbon shows were observed in the well.

No cores were cut. No fluid sample was taken.

The well was permanently abandoned on 1 July 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] |
|-------------------------------|-----------------------------------|
| 295.50                        | 2899.00                           |

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

## Lithostratigraphy

| Top depth [mMD RKB] | Lithostrat. unit             |
|---------------------|------------------------------|
| 296                 | <a href="#">NORDLAND GP</a>  |
| 737                 | <a href="#">NAUST FM</a>     |
| 1405                | <a href="#">KAI FM</a>       |
| 1675                | <a href="#">HORDALAND GP</a> |



|      |                                 |
|------|---------------------------------|
| 1675 | <a href="#">BRYGGE FM</a>       |
| 1998 | <a href="#">ROGALAND GP</a>     |
| 1998 | <a href="#">TARE FM</a>         |
| 2040 | <a href="#">TANG FM</a>         |
| 2083 | <a href="#">SHETLAND GP</a>     |
| 2083 | <a href="#">SPRINGAR FM</a>     |
| 2151 | <a href="#">NISE FM</a>         |
| 2298 | <a href="#">KVITNOS FM</a>      |
| 2350 | <a href="#">CROMER KNOLL GP</a> |
| 2350 | <a href="#">LANGE FM</a>        |
| 2580 | <a href="#">LYR FM</a>          |
| 2604 | <a href="#">VIKING GP</a>       |
| 2604 | <a href="#">SPEKK FM</a>        |
| 2713 | <a href="#">MELKE FM</a>        |
| 2845 | <a href="#">FANGST GP</a>       |
| 2845 | <a href="#">GARN FM</a>         |
| 2880 | <a href="#">NOT FM</a>          |

## Logs

| Log type                        | Log top depth [m] | Log bottom depth [m] |
|---------------------------------|-------------------|----------------------|
| DI                              | 295               | 380                  |
| DI                              | 380               | 501                  |
| GR RES PWD DI SON               | 295               | 380                  |
| GR RES PWD DI SON               | 380               | 501                  |
| GR RES PWD DI SON               | 501               | 2569                 |
| GR RES PWD DI SON DEN NEU STETH | 2569              | 2900                 |

## 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                  | 374.1            | 36                | 380.0          | 0.00                     |                     |
| SURF.COND.  | 20                  | 495.0            | 26                | 501.0          | 1.29                     | LOT                 |
| INTERM.     | 13 3/8              | 1542.0           | 17 1/2            | 1550.0         | 0.00                     |                     |
| LINER       | 9 5/8               | 2563.0           | 12 1/4            | 2569.0         | 1.50                     | FIT                 |
| OPEN HOLE   |                     | 2900.0           | 8 1/2             | 2900.0         | 0.00                     |                     |

**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 |
|-----------------|--------------------------|------------------|---------------------|-----------------|------------------|
| 380             | 1.22                     | 10.0             |                     | KCl/Polymer mud |                  |
| 466             | 1.14                     | 8.0              |                     | KCl polymer     |                  |
| 467             | 1.23                     | 12.0             |                     | KCl/Polymer mud |                  |
| 501             | 1.02                     | 2.0              |                     | Seawater        |                  |
| 504             | 1.14                     | 9.0              |                     | KCl polymer     |                  |
| 988             | 1.17                     | 16.0             |                     | EMS 4400        |                  |
| 1550            | 1.26                     | 20.0             |                     | EMS 4400        |                  |
| 1569            | 1.47                     | 30.0             |                     | EMS 4400        |                  |
| 2003            | 1.47                     | 30.0             |                     | EMS 4400        |                  |