



## Generell informasjon

|                                          |                                         |
|------------------------------------------|-----------------------------------------|
| Brønnbane navn                           | 16/7-10                                 |
| Type                                     | EXPLORATION                             |
| Formål                                   | WILDCAT                                 |
| Status                                   | P&A                                     |
| Pressemelding                            | <a href="#">lenke til pressemelding</a> |
| Faktakart i nytt vindu                   | <a href="#">lenke til kart</a>          |
| Hovedområde                              | NORTH SEA                               |
| Funn                                     | <a href="#">16/7-10</a>                 |
| Brønn navn                               | 16/7-10                                 |
| Seismisk lokalisering                    | inline 4200/xline 4214                  |
| Utvinningstillatelse                     | <a href="#">569</a>                     |
| Boreoperatør                             | Statoil Petroleum AS                    |
| Boretillatelse                           | 1359-L                                  |
| Boreinnretning                           | <a href="#">OCEAN VANGUARD</a>          |
| Boredager                                | 67                                      |
| Borestart                                | 09.07.2011                              |
| Boreslutt                                | 13.09.2011                              |
| Frigitt dato                             | 13.09.2013                              |
| Publiseringsdato                         | 13.09.2013                              |
| Opprinnelig formål                       | WILDCAT                                 |
| Gjenåpnet                                | NO                                      |
| Innhold                                  | GAS/CONDENSATE                          |
| Funnbrønnbane                            | YES                                     |
| 1. nivå med hydrokarboner, alder         | EARLY PALEOCENE                         |
| 1. nivå med hydrokarboner, formasjon.    | TY FM                                   |
| Avstand, boredekk - midlere havflate [m] | 22.0                                    |
| Vanndybde ved midlere havflate [m]       | 85.0                                    |
| Totalt målt dybde (MD) [m RKB]           | 2514.0                                  |
| Totalt vertikalt dybde (TVD) [m RKB]     | 2513.0                                  |
| Maks inklinasjon [°]                     | 6.4                                     |
| Eldste penetrerte alder                  | LATE CRETACEOUS                         |
| Eldste penetrerte formasjon              | TOR FM                                  |
| Geodetisk datum                          | ED50                                    |
| NS grader                                | 58° 29' 56.56" N                        |
| ØV grader                                | 2° 1' 31.42" E                          |
| NS UTM [m]                               | 6484832.90                              |



|                      |           |
|----------------------|-----------|
| ØV UTM [m]           | 443193.93 |
| UTM sone             | 31        |
| NPDID for brønnbanen | 6607      |

## Brønnhistorie

### General

Well 16/7-10 was drilled on the Theta Prospect in the South Viking Graben in the North Sea, close to the Sleipner field. The prospect was seen as a possible extension of the 16/7-2 discovery in the Ty Formation. The main target was Ty Formation turbidite sands.

### Operations and results

The semi-submersible installation Ocean Vanguard drilled this well. A 8 1/2" pilot hole 16/7-U-1 was drilled to 610.5 m prior to the main well due to shallow gas warning. At this depth a substantial amount of shallow gas was detected with the ROV sonar. The pilot hole was plugged back. Wildcat well 16/7-10 was spudded on 9 July 2011, 16 m away from the pilot hole. After intermediate wire line logging in the 12 1/4" section, it was not possible to get the 9 5/8" liner to section TD. A technical side-track (16/7-10 T2) was performed from the 16/7-10 well, with a kick-off point at 1916 m, and drilled to final TD at 2514 m in the Late Cretaceous Tor Formation. The well was drilled with sea water and sweeps down to 503 m, with Performadril mud from 503 m to 1151 m, and with XP-07 #14 oil based mud from 1151 m to TD.

Rocks of Quaternary, Tertiary and Cretaceous age were penetrated. The Ty Formation was encountered with Good reservoir sand at 2348.5 m (2347.5 m TVD), 35.5 m deeper than prognosed. Results of the Theta NE well showed a considerably reduced hydrocarbon column relative to prognosis (2 m gross HC bearing interval vs. 36 m expected). The GWC was found to be at 2349 m (2328 m TVD MSL), the same as encountered at 16/7-2, supporting pressure communication between the two wells. Reservoir parameters were also similar, with Ty Formation 115 m gross reservoir interval, 88 % Net to Gross and 27 % porosity. Hydrocarbon saturation was estimated to 51 %. No oil shows were reported from the well. The use of oil based mud obscured visible shows analysis below 1151 m

No conventional cores were cut in the well. MDT wire line fluid samples were taken in the Ty Formation at 2348.6 m (2347.6 m TVD; gas/condensate with ca 3% hydrocarbon contamination from mud) and 2383.0 m (2382 m TVD; water).

The well was permanently abandoned on 13 September 2011 as a minor gas discovery.

### Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

|                               |                               |
|-------------------------------|-------------------------------|
| Borekaksprøve, topp dybde [m] | Borekaksprøve, bunn dybde [m] |
| 510.00                        | 2270.00                       |

|                                        |     |
|----------------------------------------|-----|
| Borekaks tilgjengelig for prøvetaking? | YES |
|----------------------------------------|-----|

Palynologiske preparater i Sokkeldirektoratet

| Prøve dybde | Dybde enhet | Prøve type | Laboratorie |
|-------------|-------------|------------|-------------|
| 1160.0      | [m]         | DC         | FUGRO       |
| 1180.0      | [m]         | DC         | FUGRO       |
| 1200.0      | [m]         | DC         | FUGRO       |
| 1220.0      | [m]         | DC         | FUGRO       |
| 1240.0      | [m]         | DC         | FUGRO       |
| 1260.0      | [m]         | DC         | FUGRO       |
| 1280.0      | [m]         | DC         | FUGRO       |
| 1300.0      | [m]         | DC         | FUGRO       |
| 1330.0      | [m]         | DC         | FUGRO       |
| 1340.0      | [m]         | DC         | FUGRO       |
| 1370.0      | [m]         | DC         | FUGRO       |
| 1390.0      | [m]         | DC         | FUGRO       |
| 1400.0      | [m]         | DC         | FUGRO       |
| 1420.0      | [m]         | DC         | FUGRO       |
| 1440.0      | [m]         | DC         | FUGRO       |
| 1460.0      | [m]         | DC         | FUGRO       |
| 1480.0      | [m]         | DC         | FUGRO       |
| 1500.0      | [m]         | DC         | FUGRO       |
| 1520.0      | [m]         | DC         | FUGRO       |
| 1540.0      | [m]         | DC         | FUGRO       |
| 1560.0      | [m]         | DC         | FUGRO       |
| 1580.0      | [m]         | DC         | FUGRO       |
| 1600.0      | [m]         | DC         | FUGRO       |
| 1620.0      | [m]         | DC         | FUGRO       |
| 1640.0      | [m]         | DC         | FUGRO       |
| 1660.0      | [m]         | DC         | FUGRO       |
| 1680.0      | [m]         | DC         | FUGRO       |
| 1700.0      | [m]         | DC         | FUGRO       |
| 1720.0      | [m]         | DC         | FUGRO       |
| 1740.0      | [m]         | DC         | FUGRO       |
| 1760.0      | [m]         | DC         | FUGRO       |



# Faktasider

## Brønnbane / Leting

Utskriftstidspunkt: 19.5.2024 - 19:15

|        |     |    |       |
|--------|-----|----|-------|
| 1790.0 | [m] | DC | FUGRO |
| 1800.0 | [m] | DC | FUGRO |
| 1820.0 | [m] | DC | FUGRO |
| 1840.0 | [m] | DC | FUGRO |
| 1860.0 | [m] | DC | FUGRO |
| 1880.0 | [m] | DC | FUGRO |
| 1900.0 | [m] | DC | FUGRO |
| 1920.0 | [m] | DC | FUGRO |
| 1940.0 | [m] | DC | FUGRO |
| 1960.0 | [m] | DC | FUGRO |
| 1980.0 | [m] | DC | FUGRO |
| 2000.0 | [m] | DC | FUGRO |
| 2020.0 | [m] | DC | FUGRO |
| 2040.0 | [m] | DC | FUGRO |
| 2060.0 | [m] | DC | FUGRO |
| 2080.0 | [m] | DC | FUGRO |
| 2100.0 | [m] | DC | FUGRO |
| 2120.0 | [m] | DC | FUGRO |
| 2140.0 | [m] | DC | FUGRO |
| 2160.0 | [m] | DC | FUGRO |
| 2180.0 | [m] | DC | FUGRO |
| 2200.0 | [m] | DC | FUGRO |
| 2220.0 | [m] | DC | FUGRO |
| 2240.0 | [m] | DC | FUGRO |
| 2270.0 | [m] | DC | FUGRO |
| 2280.0 | [m] | DC | FUGRO |
| 2283.0 | [m] | DC | FUGRO |
| 2289.0 | [m] | DC | FUGRO |
| 2295.0 | [m] | DC | FUGRO |
| 2301.0 | [m] | DC | FUGRO |
| 2307.0 | [m] | DC | FUGRO |
| 2313.0 | [m] | DC | FUGRO |
| 2319.0 | [m] | DC | FUGRO |
| 2325.0 | [m] | DC | FUGRO |
| 2331.0 | [m] | DC | FUGRO |
| 2337.0 | [m] | DC | FUGRO |
| 2343.0 | [m] | DC | FUGRO |
| 2349.0 | [m] | DC | FUGRO |
| 2355.0 | [m] | DC | FUGRO |
| 2361.0 | [m] | DC | FUGRO |



|        |     |    |       |
|--------|-----|----|-------|
| 2367.0 | [m] | DC | FUGRO |
| 2373.0 | [m] | DC | FUGRO |
| 2379.0 | [m] | DC | FUGRO |
| 2385.0 | [m] | DC | FUGRO |
| 2391.0 | [m] | DC | FUGRO |
| 2397.0 | [m] | DC | FUGRO |
| 2403.0 | [m] | DC | FUGRO |
| 2406.0 | [m] | DC | FUGRO |
| 2412.0 | [m] | DC | FUGRO |
| 2418.0 | [m] | DC | FUGRO |
| 2424.0 | [m] | DC | FUGRO |
| 2430.0 | [m] | DC | FUGRO |
| 2436.0 | [m] | DC | FUGRO |
| 2442.0 | [m] | DC | FUGRO |
| 2448.0 | [m] | DC | FUGRO |
| 2454.0 | [m] | DC | FUGRO |
| 2460.0 | [m] | DC | FUGRO |
| 2466.0 | [m] | DC | FUGRO |
| 2484.0 | [m] | DC | FUGRO |
| 2490.0 | [m] | DC | FUGRO |
| 2496.0 | [m] | DC | FUGRO |
| 2502.0 | [m] | DC | FUGRO |
| 2508.0 | [m] | DC | FUGRO |
| 2515.0 | [m] | DC | FUGRO |

**Oljeprøver i Søkeldirektoratet**

| Test type | Flaske nummer | Topp dyp MD [m] | Bunn dyp MD [m] | Væske type  | Test tidspunkt     | Prøver tilgjengelig |
|-----------|---------------|-----------------|-----------------|-------------|--------------------|---------------------|
| MDT       |               | 2348.70         | 0.00            | CONDE NSATE | 09.02.2011 - 00:00 | NO                  |

**Litostratigrafi**

| Topp Dyb [mMD RKB] | Litostrat. enhet             |
|--------------------|------------------------------|
| 107                | <a href="#">NORDLAND GP</a>  |
| 793                | <a href="#">UTSIRA FM</a>    |
| 1107               | <a href="#">HORDALAND GP</a> |



|      |                                |
|------|--------------------------------|
| 1398 | <a href="#">SKADE FM</a>       |
| 1414 | <a href="#">NO FORMAL NAME</a> |
| 1951 | <a href="#">GRID FM</a>        |
| 2002 | <a href="#">NO FORMAL NAME</a> |
| 2172 | <a href="#">ROGALAND GP</a>    |
| 2172 | <a href="#">BALDER FM</a>      |
| 2217 | <a href="#">SELE FM</a>        |
| 2264 | <a href="#">LISTA FM</a>       |
| 2335 | <a href="#">VÅLE FM</a>        |
| 2349 | <a href="#">TY FM</a>          |
| 2467 | <a href="#">SHETLAND GP</a>    |
| 2467 | <a href="#">EKOFISK FM</a>     |
| 2500 | <a href="#">TOR FM</a>         |

## Logger

| Type logg                       | Topp dyp<br>for logg [m] | Bunn dyp for<br>logg [m] |
|---------------------------------|--------------------------|--------------------------|
| GPIT MSIP PEX                   | 503                      | 1160                     |
| GPIT MSIP PEX GR                | 1030                     | 2265                     |
| GPIT MSIP PEX GR                | 2140                     | 2513                     |
| MDT                             | 2347                     | 2347                     |
| MDT                             | 2490                     | 2490                     |
| MDT TLC                         | 2348                     | 2383                     |
| MWD LWD - ARC ECOS SON<br>TELES | 107                      | 610                      |
| MWD LWD - ARCVRES6 TELE         | 1944                     | 2283                     |
| MWD LWD - ARCVRS9 TELES         | 503                      | 2278                     |
| MWD LWD - IMPVRES4 VPWD4        | 2283                     | 2514                     |
| PEX GR                          | 1117                     | 2185                     |
| USIT                            | 2000                     | 2280                     |
| VSP                             | 1956                     | 2350                     |
| VSP GR                          | 520                      | 2183                     |

## Foringsrør og formasjonsstyrketester

| Type utforing | Utforing<br>diam.<br>[tommer] | Utforing<br>dybde<br>[m] | Brønnbane<br>diam.<br>[tommer] | Brønnbane<br>dyp<br>[m] | LOT/FIT slam<br>eqv.<br>[g/cm3] | Type<br>formasjonstest |
|---------------|-------------------------------|--------------------------|--------------------------------|-------------------------|---------------------------------|------------------------|
| CONDUCTOR     | 30                            | 172.0                    | 36                             | 172.0                   | 0.00                            | LOT                    |
| SURF.COND.    | 20                            | 497.0                    | 26                             | 503.0                   | 1.46                            | LOT                    |



|            |        |        |        |        |      |     |
|------------|--------|--------|--------|--------|------|-----|
| PILOT HOLE |        | 610.0  | 8 1/2  | 610.0  | 0.00 | LOT |
| INTERM.    | 13 3/8 | 1151.0 | 17 1/2 | 1151.0 | 1.76 | LOT |
| INTERM.    | 9 5/8  | 1905.0 | 12 1/4 | 2265.0 | 0.00 | LOT |
| LINER      | 7      | 2282.0 | 8 1/2  | 2282.0 | 1.35 | LOT |
| OPEN HOLE  |        | 2514.0 | 6      | 2514.0 | 0.00 | LOT |

Boreslam

| Dybde MD [m] | Egenvekt, slam [g/cm3] | Viskositet, slam [mPa.s] | Flytegrense [Pa] | Type slam    | Dato, måling |
|--------------|------------------------|--------------------------|------------------|--------------|--------------|
| 150          | 1.03                   | 15.0                     |                  | Spud Mud     |              |
| 347          | 1.33                   | 19.0                     |                  | Spud Mud     |              |
| 487          | 1.31                   | 20.0                     |                  | Spud Mud     |              |
| 503          | 1.24                   | 12.0                     |                  | Performadril |              |
| 1160         | 1.30                   | 28.0                     |                  | Performadril |              |
| 1180         | 1.18                   | 19.0                     |                  | XP-07 - #14  |              |
| 1906         | 1.45                   | 32.0                     |                  | XP-07 - #14  |              |
| 1944         | 1.45                   | 23.0                     |                  | XP-07 - #14  |              |
| 2072         | 1.31                   | 16.0                     |                  | Spud Mud     |              |
| 2072         | 1.30                   | 15.0                     |                  | Spud Mud     |              |
| 2278         | 1.35                   | 19.0                     |                  | XP-07 - #14  |              |
| 2278         | 1.35                   | 21.0                     |                  | XP-07 - #14  |              |
| 2283         | 1.47                   | 25.0                     |                  | XP-07 - #14  |              |
| 2514         | 1.24                   | 17.0                     |                  | XP-07 - #14  |              |
| 2514         | 1.20                   | 16.0                     |                  | XP-07 - #14  |              |