



## Generell informasjon

|                                          |                                                    |
|------------------------------------------|----------------------------------------------------|
| Brønnbane navn                           | 24/12-6 S                                          |
| 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                                          |
| Brønn navn                               | 24/12-6                                            |
| Seismisk lokalisering                    | SurveyWGS2413R06 PSDM inline 2513 & crossline 1519 |
| Utvinningstillatelse                     | <a href="#">341</a>                                |
| Boreoperatør                             | Det norske oljeselskap ASA                         |
| Boretillatelse                           | 1297-L                                             |
| Boreinnretning                           | <a href="#">SONGA DELTA</a>                        |
| Boredager                                | 127                                                |
| Borestart                                | 16.08.2010                                         |
| Boreslutt                                | 20.12.2010                                         |
| Frigitt dato                             | 01.04.2012                                         |
| Publiseringsdato                         | 01.04.2012                                         |
| Opprinnelig formål                       | WILDCAT                                            |
| Gjenåpnet                                | NO                                                 |
| Innhold                                  | DRY                                                |
| Funnbrønnbane                            | NO                                                 |
| Avstand, boredekk - midlere havflate [m] | 29.0                                               |
| Vanndybde ved midlere havflate [m]       | 116.0                                              |
| Totalt målt dybde (MD) [m RKB]           | 5207.0                                             |
| Totalt vertikalt dybde (TVD) [m RKB]     | 5076.0                                             |
| Maks inklinasjon [°]                     | 21.7                                               |
| Eldste penetrerte alder                  | MIDDLE JURASSIC                                    |
| Eldste penetrerte formasjon              | SLEIPNER FM                                        |
| Geodetisk datum                          | ED50                                               |
| NS grader                                | 59° 3' 54.14" N                                    |
| ØV grader                                | 1° 45' 15.24" E                                    |
| NS UTM [m]                               | 6548111.45                                         |
| ØV UTM [m]                               | 428561.94                                          |
| UTM sone                                 | 31                                                 |
| NPDID for brønnbanen                     | 6328                                               |

**Brønnhistorie****General**

Well 24/12-6 S was drilled on the Stirby prospect in the Vana Sub-basin of the Viking Graben in the North Sea. Stirby was a potential multipay structure and the main target was the Late Jurassic Intra Draupne Formation Sandstones ("Stirby Upper"). The secondary target was the Middle Jurassic Hugin/Sleipner Formation sandstones ("Stirby Deep"). Additional targets was possible in the Heather Formation with potential for reservoir sands deposited from the east as encountered in the Gudrun Field south of the Stirby location.

**Operations and results**

Wildcat well 24/12-6 S was spudded with the semi-submersible installation Songa Delta on 16 August 2010 and drilled to TD at 5207 m (5076 m TVD) in the Middle Jurassic Sleipner Formation. Severe hole problems with excessive cavings and tight hole was experienced in the 17 1/2" section from 1279 m to 2771 m. The reason for this was believed to be too high concentrations of KCl, drying out the claystone. Due to these problems the well was plugged back and sidetracked from 1300 m. The well was drilled with Spud mud down to 1279 m, and with KCl brine from 1279 m to 2771 m. After sidetracking the well was drilled with Carbotech oil based mud from 1300 m to 4330, and with Magmatech oil based mud from 4330 m to TD.

The Draupne Formation was encountered at from 4417 m (4286 m TVD), the Heather Formation at 4788 m (4657 m TVD), and top Vestland Group, Hugin Formation at 5029 m (4898 m TVD). Only rare traces of sand were seen at the expected primary target, the Late Jurassic Intra Draupne Sand (Stirby Upper). This part of the well contained organic rich shale with thin beds of limestone. These limestone beds correspond to the strong amplitudes which defined the main target as a basin floor fan in the prognosis. The secondary target, the Middle Jurassic Vestland Group (Stirby Deep), came in 7.8 m deeper than prognosed. An upper sandstone, probably belonging to the Hugin Formation, was described as silica cemented. Only one stable pressure point was collected here and thereby no gradient defining hydrocarbon or water was obtained. In the lower sandstone just above TD of the well another pressure point reading was obtained, 33 bar lower than the one in "Upper sandstone". Scanning evaluation with the RCI tool in the lower sandstone gave the conclusion that this sand was water filled. No oil shows were reported above BCU. Direct and cut fluorescence was observed on traces of sandstone grains/aggregates from top Hugin Formation and downwards. The fluorescence on the aggregates was however difficult to interpret due to possible interference from mineral fluorescence, oil base and rock flour.

No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 20 December 2010 as a dry well.

**Testing**

No drill stem test was performed.



### Borekaks i Sokkeldirektoratet

| Borekaksprøve, topp dybde [m] | Borekaksprøve, bunn dybde [m] |
|-------------------------------|-------------------------------|
| 1290.00                       | 2770.00                       |

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

### Litostratigrafi

| Topp Dyb<br>[mMD RKB] | Litostrat. enhet                |
|-----------------------|---------------------------------|
| 145                   | <a href="#">NORDLAND GP</a>     |
| 504                   | <a href="#">UTSIRA FM</a>       |
| 681                   | <a href="#">NO FORMAL NAME</a>  |
| 848                   | <a href="#">HORDALAND GP</a>    |
| 848                   | <a href="#">SKADE FM</a>        |
| 1043                  | <a href="#">NO FORMAL NAME</a>  |
| 1356                  | <a href="#">GRID FM</a>         |
| 1682                  | <a href="#">NO FORMAL NAME</a>  |
| 2162                  | <a href="#">ROGALAND GP</a>     |
| 2162                  | <a href="#">BALDER FM</a>       |
| 2208                  | <a href="#">SELE FM</a>         |
| 2262                  | <a href="#">LISTA FM</a>        |
| 2273                  | <a href="#">HEIMDAL FM</a>      |
| 2693                  | <a href="#">VÅLE FM</a>         |
| 2761                  | <a href="#">SHETLAND GP</a>     |
| 2761                  | <a href="#">JORSALFARE FM</a>   |
| 3080                  | <a href="#">KYRRE FM</a>        |
| 3741                  | <a href="#">TRYGGVASON FM</a>   |
| 3913                  | <a href="#">BLODØKS FM</a>      |
| 3917                  | <a href="#">SVARTE FM</a>       |
| 4148                  | <a href="#">CROMER KNOLL GP</a> |
| 4148                  | <a href="#">RØDBY FM</a>        |
| 4222                  | <a href="#">SOLA FM</a>         |
| 4281                  | <a href="#">ÅSGARD FM</a>       |
| 4417                  | <a href="#">VIKING GP</a>       |
| 4417                  | <a href="#">DRAUPNE FM</a>      |
| 4788                  | <a href="#">HEATHER FM</a>      |
| 5029                  | <a href="#">VESTLAND GP</a>     |



|      |                             |
|------|-----------------------------|
| 5029 | <a href="#">HUGIN FM</a>    |
| 5120 | <a href="#">SLEIPNER FM</a> |

Logger

| Type logg                          | Topp dyp<br>for logg [m] | Bunn dyp for<br>logg [m] |
|------------------------------------|--------------------------|--------------------------|
| CALI MRCH GR CCL MFC               | 100                      | 4268                     |
| CBL MRCH GR CCL SBT MFC            | 3778                     | 4263                     |
| DEN NEU MRCH JAR TTRM GR ZDL<br>CN | 4317                     | 5204                     |
| LWD - GR REMP AC                   | 196                      | 2770                     |
| MWD - GR REMP AC                   | 196                      | 4326                     |
| MWD - GR REMP DEN NEU AC           | 4300                     | 4767                     |
| MWD - GR REMP DEN NEU AC FMP       | 4738                     | 5204                     |
| PRES MRCH JAR TTRM GR RCI PVT      | 5030                     | 5207                     |
| RES MRCH JAR TTRM DSL HDIL<br>MREX | 4300                     | 5187                     |
| VSP GR GEOWAVE                     | 205                      | 4135                     |

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                            | 225.0                    | 36                             | 229.0                   | 0.00                            | LOT                    |
| SURF.COND.    | 20                            | 1273.0                   | 26                             | 1279.0                  | 0.00                            | LOT                    |
| PILOT HOLE    |                               | 1279.0                   | 9 7/8                          | 1279.0                  | 0.00                            | LOT                    |
| INTERM.       | 13 5/8                        | 2812.0                   | 17 1/2                         | 2828.0                  | 2.20                            | LOT                    |
| INTERM.       | 9 5/8                         | 4321.0                   | 12 1/4                         | 4330.0                  | 0.00                            | LOT                    |
| OPEN HOLE     |                               | 5207.0                   | 8 1/2                          | 5207.0                  | 1.77                            | LOT                    |

Boreslam

| Dybde<br>MD [m] | Egenvekt,<br>slam<br>[g/cm3] | Viskositet,<br>slam<br>[mPa.s] | Flytegrense<br>[Pa] | Type slam  | Dato, måling |
|-----------------|------------------------------|--------------------------------|---------------------|------------|--------------|
| 174             | 1.05                         |                                |                     | SPUD MUD   |              |
| 226             | 1.05                         |                                |                     | SPUD MUD   |              |
| 990             | 1.05                         |                                |                     | SPUD MUD   |              |
| 1120            | 1.05                         |                                |                     | SPUD MUD   |              |
| 1223            | 1.36                         | 39.0                           |                     | CARBO TECH |              |



## Faktasider

### Brønnbane / Leting

Utskriftstidspunkt: 15.5.2024 - 19:16

|      |      |      |  |            |  |
|------|------|------|--|------------|--|
| 1279 | 1.45 |      |  | SPUD MUD   |  |
| 1445 | 1.45 | 13.0 |  | KCL BRINE  |  |
| 1720 | 1.25 | 16.0 |  | KCL BRINE  |  |
| 2500 | 1.39 | 42.0 |  | CARBO TECH |  |
| 2653 | 1.32 | 14.0 |  | KCL BRINE  |  |
| 2711 | 1.32 | 18.0 |  | KCL BRINE  |  |
| 2746 | 1.39 | 41.0 |  | CARBO TECH |  |
| 2828 | 1.39 | 39.0 |  | CARBO TECH |  |
| 3051 | 1.60 | 37.0 |  | CARBO TECH |  |
| 3800 | 1.60 | 37.0 |  | CARBO TECH |  |
| 4150 | 1.60 | 45.0 |  | CARBO TECH |  |
| 4276 | 1.65 | 53.0 |  | CARBO TECH |  |
| 4276 | 1.65 | 42.0 |  | CARBO TECH |  |
| 4330 | 1.65 | 41.0 |  | CARBO TECH |  |
| 4772 | 2.00 | 47.0 |  | MAGMA TECH |  |
| 5101 | 2.00 | 50.0 |  | MAGMA TECH |  |
| 5207 | 2.02 | 51.0 |  | MAGMA TECH |  |