



## Generell informasjon

|                                          |                                  |
|------------------------------------------|----------------------------------|
| Brønnbane navn                           | 6407/12-1                        |
| Type                                     | EXPLORATION                      |
| Formål                                   | APPRAISAL                        |
| Status                                   | P&A                              |
| Faktakart i nytt vindu                   | <a href="#">lenke til kart</a>   |
| Hovedområde                              | NORWEGIAN SEA                    |
| Felt                                     | <a href="#">DRAUGEN</a>          |
| Funn                                     | <a href="#">6407/9-1 Draugen</a> |
| Brønn navn                               | 6407/12-1                        |
| Seismisk lokalisering                    | SH 9002- INLINE 414 & X-LINE 412 |
| Utvinningstillatelse                     | <a href="#">176</a>              |
| Boreoperatør                             | A/S Norske Shell                 |
| Boretillatelse                           | 958-L                            |
| Boreinnretning                           | <a href="#">MÆRSK JUTLANDER</a>  |
| Boredager                                | 9                                |
| Borestart                                | 07.07.1999                       |
| Boreslutt                                | 15.07.1999                       |
| Frigitt dato                             | 15.07.2001                       |
| Publiseringsdato                         | 29.05.2002                       |
| Opprinnelig formål                       | WILDCAT                          |
| Gjenåpnet                                | NO                               |
| Innhold                                  | OIL                              |
| Funnbrønnbane                            | NO                               |
| 1. nivå med hydrokarboner, alder         | LATE JURASSIC                    |
| 1. nivå med hydrokarboner, formasjon.    | ROGN FM                          |
| Avstand, boredekk - midlere havflate [m] | 23.0                             |
| Vanndybde ved midlere havflate [m]       | 289.0                            |
| Totalt målt dybde (MD) [m RKB]           | 1805.0                           |
| Totalt vertikalt dybde (TVD) [m RKB]     | 1802.9                           |
| Maks inklinasjon [°]                     | 2.1                              |
| Temperatur ved bunn av brønnbanen [°C]   | 69                               |
| Eldste penetrerte alder                  | MIDDLE JURASSIC                  |
| Eldste penetrerte formasjon              | GARN FM                          |
| Geodetisk datum                          | ED50                             |
| NS grader                                | 64° 14' 23.44" N                 |



|                      |                |
|----------------------|----------------|
| ØV grader            | 7° 42' 7.98" E |
| NS UTM [m]           | 7124559.46     |
| ØV UTM [m]           | 437067.41      |
| UTM sone             | 32             |
| NPDID for brønnbanen | 3781           |

## Brønnhistorie

### General

Exploration well 6407/12-1 is located on the western edge of the Trøndelag Platform in PL176, some 13 km South of the Draugen platform. It was drilled to test the hydrocarbon potential of the Upper Jurassic sands of the Rogn Formation, which is the main reservoir unit in the Draugen Field. The second objective was to log and sample the upper 20 m of the Middle Jurassic Garn Formation.

### Operations and results

The well was spudded on 7 July 1999 with the semi-submersible installation "Mærsk Jutlander" and drilled to a total depth of 1805 m in sandstone of the Garn Formation. It was drilled with sea water and Hi-vis bentonite pills to 714 m and with BARASILC silicate mud from 714 m to TD. The well found 2.3 m of oil-bearing sands in good quality reservoirs of the Rogn Formation. The Rogn Formation in the well is in pressure communication with the Rogn Formation reservoir of the Draugen Field. An oil MDT sample was acquired from 1660.7 m in the Rogn Formation. Sampling occurred extremely slowly despite a recorded mobility of 249 md/cp and a high porosity indicated from the density log. This suggests potential plugging of the probe due to the unconsolidated nature of the Rogn sandstone. The Garn Formation came in at 1763 m. No conventional core was cut in the well. The well was plugged and abandoned on 15 July 1999.

### Testing

No drill stem test was performed

## Borekaks i Sokkeldirektoratet

|                               |                               |
|-------------------------------|-------------------------------|
| Borekaksprøve, topp dybde [m] | Borekaksprøve, bunn dybde [m] |
| 970.00                        | 1805.00                       |

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

## Palynologiske preparater i Sokkeldirektoratet

| Prøve dybde | Dybde enhet | Prøve type | Laboratorie |
|-------------|-------------|------------|-------------|
| 970.0       | [m]         | DC         | RRI         |
| 990.0       | [m]         | DC         | RRI         |
| 1010.0      | [m]         | DC         | RRI         |



|            |    |       |
|------------|----|-------|
| 1030.0 [m] | DC | RRI   |
| 1050.0 [m] | DC | RRI   |
| 1070.0 [m] | DC | RRI   |
| 1080.0 [m] | DC | RRI   |
| 1100.0 [m] | DC | RRI   |
| 1120.0 [m] | DC | RRI   |
| 1140.0 [m] | DC | RRI   |
| 1160.0 [m] | DC | RRI   |
| 1180.0 [m] | DC | RRI   |
| 1190.0 [m] | DC | RRI   |
| 1210.0 [m] | DC | RRI   |
| 1210.0 [m] | DC | FUGRO |
| 1230.0 [m] | DC | FUGRO |
| 1230.0 [m] | DC | RRI   |
| 1240.0 [m] | DC | RRI   |
| 1240.0 [m] | DC | FUGRO |
| 1260.0 [m] | DC | FUGRO |
| 1260.0 [m] | DC | RRI   |
| 1280.0 [m] | DC | RRI   |
| 1280.0 [m] | DC | FUGRO |
| 1290.0 [m] | DC | FUGRO |
| 1300.0 [m] | DC | FUGRO |
| 1300.0 [m] | DC | RRI   |
| 1305.0 [m] | DC | FUGRO |
| 1310.0 [m] | DC | FUGRO |
| 1315.0 [m] | DC | RRI   |
| 1320.0 [m] | DC | FUGRO |
| 1330.0 [m] | DC | RRI   |
| 1340.0 [m] | DC | FUGRO |
| 1350.0 [m] | DC | RRI   |
| 1360.0 [m] | DC | FUGRO |
| 1370.0 [m] | DC | RRI   |
| 1380.0 [m] | DC | FUGRO |
| 1390.0 [m] | DC | RRI   |
| 1400.0 [m] | DC | FUGRO |
| 1410.0 [m] | DC | RRI   |
| 1420.0 [m] | DC | FUGRO |
| 1430.0 [m] | DC | RRI   |
| 1440.0 [m] | DC | FUGRO |
| 1450.0 [m] | DC | RRI   |



# Faktasider

## Brønnbane / Leting

Utskriftstidspunkt: 19.5.2024 - 02:55

|            |     |          |
|------------|-----|----------|
| 1460.0 [m] | DC  | FUGRO    |
| 1470.0 [m] | DC  | RRI      |
| 1490.0 [m] | DC  | RRI      |
| 1509.0 [m] | DC  | RRI      |
| 1527.0 [m] | DC  | RRI      |
| 1539.0 [m] | DC  | RRI      |
| 1548.0 [m] | DC  | RRI      |
| 1563.0 [m] | DC  | RRI      |
| 1578.0 [m] | DC  | RRI      |
| 1584.0 [m] | DC  | RRI      |
| 1587.0 [m] | DC  | RRI      |
| 1590.0 [m] | DC  | RRI      |
| 1596.0 [m] | DC  | RRI      |
| 1611.0 [m] | DC  | RRI      |
| 1617.0 [m] | DC  | RRI      |
| 1620.0 [m] | SWC | RRI      |
| 1622.0 [m] | SWC | RRI      |
| 1623.0 [m] | DC  | PETROSTR |
| 1632.0 [m] | DC  | PETROS   |
| 1632.0 [m] | DC  | RRI      |
| 1635.0 [m] | DC  | RRI      |
| 1635.0 [m] | SWC | RRI      |
| 1645.0 [m] | SWC | RRI      |
| 1647.0 [m] | DC  | RRI      |
| 1647.0 [m] | DC  | PETROSTR |
| 1655.0 [m] | SWC | RRI      |
| 1656.0 [m] | DC  | RRI      |
| 1660.0 [m] | SWC | RRI      |
| 1661.0 [m] | SWC | RRI      |
| 1662.0 [m] | SWC | RRI      |
| 1662.0 [m] | DC  | PETROSTR |
| 1665.0 [m] | SWC | RRI      |
| 1668.0 [m] | SWC | RRI      |
| 1672.5 [m] | SWC | RRI      |
| 1679.0 [m] | SWC | RRI      |
| 1680.0 [m] | DC  | PETROSTR |
| 1688.0 [m] | SWC | RRI      |
| 1689.0 [m] | DC  | PETROSTR |
| 1700.0 [m] | SWC | RRI      |
| 1707.0 [m] | DC  | RRI      |



|            |     |          |
|------------|-----|----------|
| 1707.0 [m] | DC  | PETROSTR |
| 1715.0 [m] | SWC | RRI      |
| 1719.0 [m] | DC  | PETROSTR |
| 1722.5 [m] | DC  | RRI      |
| 1725.0 [m] | DC  | PETROS   |
| 1725.0 [m] | DC  | RRI      |
| 1725.0 [m] | SWC | RRI      |
| 1730.5 [m] | SWC | RRI      |
| 1731.0 [m] | DC  | RRI      |
| 1731.0 [m] | DC  | PETROSTR |
| 1740.0 [m] | DC  | RRI      |
| 1746.0 [m] | DC  | RRI      |
| 1752.0 [m] | DC  | RRI      |
| 1758.0 [m] | DC  | RRI      |
| 1761.0 [m] | DC  | RRI      |
| 1761.0 [m] | DC  | PETROSTR |
| 1768.5 [m] | SWC | RRI      |
| 1776.0 [m] | DC  | RRI      |
| 1782.0 [m] | DC  | RRI      |
| 1785.0 [m] | DC  | RRI      |
| 1791.0 [m] | DC  | RRI      |
| 1797.0 [m] | DC  | RRI      |
| 1805.0 [m] | DC  | RRI      |

### Litostratigrafi

| Topp Dyb<br>[mMD RKB] | Litostrat. enhet                |
|-----------------------|---------------------------------|
| 314                   | <a href="#">NORDLAND GP</a>     |
| 1282                  | <a href="#">ROGALAND GP</a>     |
| 1282                  | <a href="#">TARE FM</a>         |
| 1412                  | <a href="#">TANG FM</a>         |
| 1542                  | <a href="#">SHETLAND GP</a>     |
| 1542                  | <a href="#">NISE FM</a>         |
| 1579                  | <a href="#">KVITNOS FM</a>      |
| 1591                  | <a href="#">CROMER KNOLL GP</a> |
| 1591                  | <a href="#">LANGE FM</a>        |
| 1614                  | <a href="#">LYR FM</a>          |
| 1625                  | <a href="#">VIKING GP</a>       |
| 1625                  | <a href="#">SPEKK FM</a>        |



|      |                           |
|------|---------------------------|
| 1659 | <a href="#">ROGN FM</a>   |
| 1721 | <a href="#">SPEKK FM</a>  |
| 1731 | <a href="#">MELKE FM</a>  |
| 1763 | <a href="#">FANGST GP</a> |
| 1763 | <a href="#">GARN FM</a>   |

### Spleisede logger

| Dokument navn        | Dokument format | Dokument størrelse [KB] |
|----------------------|-----------------|-------------------------|
| <a href="#">3781</a> | pdf             | 0.13                    |

### Geokjemisk informasjon

| Dokument navn          | Dokument format | Dokument størrelse [KB] |
|------------------------|-----------------|-------------------------|
| <a href="#">3781_1</a> | pdf             | 0.92                    |

### Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

| Dokument navn                                    | Dokument format | Dokument størrelse [KB] |
|--------------------------------------------------|-----------------|-------------------------|
| <a href="#">3781_6407_12_1_COMPLETION_LOG</a>    | .pdf            | 1.46                    |
| <a href="#">3781_6407_12_1_COMPLETION_REPORT</a> | .pdf            | 44.13                   |

### Logger

| Type logg                  | Topp dyp for logg [m] | Bunn dyp for logg [m] |
|----------------------------|-----------------------|-----------------------|
| CST                        | 1580                  | 1768                  |
| MDT                        | 1660                  | 1771                  |
| MWD LWD DIR                | 311                   | 1805                  |
| PEX/DSI HALS MCFL TLD HNGS | 1558                  | 1802                  |
| VSP                        | 400                   | 1800                  |

### Foringsrør og formasjonsstyrketester





| Type utforing | Utforing diam.<br>[tommer] | Utforing dybde<br>[m] | Brønnbane diam.<br>[tommer] | Brønnbane dyp<br>[m] | LOT/FIT slam eqv.<br>[g/cm3] | Type formasjonstest |
|---------------|----------------------------|-----------------------|-----------------------------|----------------------|------------------------------|---------------------|
| CONDUCTOR     | 30                         | 373.0                 | 36                          | 375.0                | 0.00                         | LOT                 |
| INTERM.       | 9 5/8                      | 1805.0                | 12 1/4                      | 1805.0               | 1.85                         | LOT                 |

### Boreslam

| Dybde MD [m] | Egenvekt, slam<br>[g/cm3] | Viskositet, slam<br>[mPa.s] | Flytegrense [Pa] | Type slam | Dato, måling |
|--------------|---------------------------|-----------------------------|------------------|-----------|--------------|
| 963          | 1.20                      | 9.0                         |                  | SPUD MUD  |              |
| 1805         | 1.35                      | 26.0                        |                  | BARASILC  |              |
| 1805         | 1.35                      | 26.0                        |                  | BARASILC  |              |

### Trykkplott

Porertrykksdataene kommer fra logging i brønnen hvis ingen annen kilde er oppgitt. I noen brønner der trykk ikke er logget, er det brukt informasjon fra formasjonstester eller brønnspark. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

| Dokument navn                                             | Dokument format | Dokument størrelse [KB] |
|-----------------------------------------------------------|-----------------|-------------------------|
| <a href="#">3781 Formation pressure (Formasjonstrykk)</a> | pdf             | 0.23                    |



