



Generell informasjon

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| Brønnbane navn | 6608/10-15 |
| Type | EXPLORATION |
| Formål | WILDCAT |
| Status | P&A |
| Pressemelding | lenke til pressemelding |
| Faktakart i nytt vindu | lenke til kart |
| Hovedområde | NORWEGIAN SEA |
| Felt | URD |
| Funn | 6608/10-15 (Svale Nord) |
| Brønn navn | 6608/10-15 |
| Seismisk lokalisering | 3D survey ST04M17 Inline 1264. X-line 2657 |
| Utvinningstillatelse | 128 |
| Boreoperatør | Statoil Petroleum AS |
| Boretillatelse | 1466-L |
| Boreinnretning | SONGA TRYM |
| Boredager | 24 |
| Borestart | 20.08.2013 |
| Boeslutt | 12.09.2013 |
| Frigitt dato | 12.09.2015 |
| Publiseringsdato | 12.09.2015 |
| Opprinnelig formål | WILDCAT |
| Gjenåpnet | NO |
| Innhold | OIL |
| Funnbrønnbane | YES |
| 1. nivå med hydrokarboner, alder | EARLY JURASSIC |
| 1. nivå med hydrokarboner, formasjon. | ÅRE FM |
| 2. nivå med hydrokarboner, alder | MIDDLE JURASSIC |
| 2. nivå med hydrokarboner, formasjon | MELKE FM |
| Avstand, boredekk - midlere havflate [m] | 25.0 |
| Vanndybde ved midlere havflate [m] | 375.0 |
| Totalt målt dybde (MD) [m RKB] | 2030.0 |
| Totalt vertikalt dybde (TVD) [m RKB] | 2030.0 |
| Maks inklinasjon [°] | 0.8 |
| Temperatur ved bunn av brønnbanen [°C] | 70 |



| | |
|-----------------------------|-----------------|
| Eldste penetrerte alder | EARLY JURASSIC |
| Eldste penetrerte formasjon | ÅRE FM |
| Geodetisk datum | ED50 |
| NS grader | 66° 5' 20.78" N |
| ØV grader | 8° 16' 41.48" E |
| NS UTM [m] | 7330215.93 |
| ØV UTM [m] | 467352.72 |
| UTM sone | 32 |
| NPDID for brønnbanen | 7245 |

Brønnhistorie

General

Well 6608/10-15 was drilled on the Svale Nord prospect about nine kilometres northeast of the Norne field in the Norwegian Sea. The primary objective was to prove petroleum in the Early Jurassic Åre Formation. The secondary objective was to prove petroleum in the Middle Jurassic Intra-Melke Formation sandstone.

Operations and results

Wildcat well 6608/10-15 was spudded with the semi-submersible installation Songa Trym on 20 August 2013 and drilled to TD at 2030 m in the Early Jurassic Formation. No shallow gas or water flows were encountered in the top hole. Operations proceeded without significant problems. The well was drilled with seawater down to 454 m, with KCl/Glycol water based mud from 554 m to 1707 m, and with KCl/GEM/Polymer - low sulphate mud from 1707 m to TD.

Top of the Intra-Melke Formation sandstone was picked at 1860 m. The Intra-Melke Formation sandstone was oil filled with an approximate 30 - 36 m oil column. The oil-water contact is estimated to be between 1890 and 1896 m. Top of the expected main reservoir, is interpreted to be a sandstone in the lower Not Formation at 1924 m while the Top Åre Formation was picked at 1934 m, 14 m deeper than prognosed. The Not/Åre sandstones showed good reservoir properties and contained an approximate 43 - 51 m oil column. The oil-water contact is most likely between the oil sample at 1967 m and the water sample at 1975.5 m, however an oil down-to situation cannot be ruled out based on the present data. Geochemical analyses of the Åre oil and gas show biodegraded oil and a mix of biogenic and thermogenic gas. The Åre 1 Formation was water saturated. No oil shows were described outside of the hydrocarbon-bearing reservoirs.

No cores were cut in the well. MDT fluid samples were taken at 1948.7 m (oil), 1948.71 m (oil), 1961 m (oil), 1967.7 m (oil), 1975.51 m (water), and 1893.81 m (water).

The well was permanently abandoned on 12 September 2013 as an oil discovery.

Testing

No drill stem test was performed.

Berekaks i Sokkeldirektoratet



| | |
|-------------------------------|-------------------------------|
| Borekaksprøve, topp dybde [m] | Borekaksprøve, bunn dybde [m] |
| 1350.00 | 2028.00 |

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

Oljeprøver i Sokkeldirektoratet

| Test type | Flaske nummer | Topp dyp MD [m] | Bunn dyp MD [m] | Væske type | Test tidspunkt | Prøver tilgjengelig |
|-----------|---------------|-----------------|-----------------|------------|----------------|---------------------|
| MDT | | 0.00 | 1963.00 | OIL | | YES |

Litostratigrafi

| Topp Dyb [mMD RKB] | Litostrat. enhet |
|--------------------|-----------------------------------|
| 400 | NORDLAND GP |
| 672 | NAUST FM |
| 1369 | KAI FM |
| 1467 | HORDALAND GP |
| 1467 | BRYGGE FM |
| 1640 | ROGALAND GP |
| 1640 | TARE FM |
| 1690 | TANG FM |
| 1714 | SHETLAND GP |
| 1714 | SPRINGAR FM |
| 1735 | CROMER KNOLL GP |
| 1735 | LYR FM |
| 1830 | VIKING GP |
| 1830 | MELKE FM |
| 1860 | INTRA MELKE FM SS |
| 1905 | FANGST GP |
| 1905 | NOT FM |
| 1934 | BÅT GP |
| 1934 | ÅRE FM |

Logger



| Type logg | Topp dyp for logg [m] | Bunn dyp for logg [m] |
|---------------------------|-----------------------|-----------------------|
| CMR HRLA PEX ECS GR | 1707 | 2030 |
| FMI MSIP GR | 1295 | 2025 |
| MDT GR | 1848 | 1961 |
| MDT GR | 1861 | 2018 |
| MDT GR | 1890 | 1961 |
| MWD - GVR ARCVIS RES TELE | 1700 | 2030 |
| MWD - PD ARC TELE | 436 | 1337 |
| MWD - PD ARCVIS RES TELE | 1300 | 1707 |
| MWD - TELE | 400 | 454 |
| VSI GR | 400 | 2020 |

Foringsrør og formasjonsstyrketester

| Type utforing | Utforing diam. [tommer] | Utforing dybde [m] | Brønnbane diam. [tommer] | Brønnbane dyp [m] | LOT/FIT slam eqv. [g/cm ³] | Type formasjonstest |
|---------------|-------------------------|--------------------|--------------------------|-------------------|--|---------------------|
| CONDUCTOR | 30 | 451.0 | 36 | 454.5 | 0.00 | |
| SURF.COND. | 13 3/8 | 1331.0 | 17 1/2 | 1337.0 | 1.41 | FIT |
| LINER | 9 5/8 | 1706.0 | 12 1/4 | 1707.0 | 1.64 | FIT |
| OPEN HOLE | | 2030.0 | 8 1/2 | 2030.0 | 0.00 | |

Boreslam

| Dybde MD [m] | Egenvekt, slam [g/cm ³] | Viskositet, slam [mPa.s] | Flytegrense [Pa] | Type slam | Dato, måling |
|--------------|-------------------------------------|--------------------------|------------------|---------------------------------|--------------|
| 437 | 1.39 | 23.0 | | KCl/Polymer/Glycol | |
| 1337 | 1.27 | 19.0 | | KCl/Polymer/Glycol | |
| 1337 | 1.28 | 17.0 | | KCl/Polymer/Glycol | |
| 1530 | 1.22 | 20.0 | | Low Sulphate/KCl/Polymer/Glycol | |
| 1707 | 1.27 | 22.0 | | KCl/Polymer/Glycol | |
| 2031 | 1.22 | 20.0 | | Low Sulphate/KCl/Polymer/Glycol | |