



General information

| | |
|------------------------------------|---------------------------------------|
| Wellbore name | 16/1-24 |
| Type | EXPLORATION |
| Purpose | WILDCAT |
| Status | P&A |
| Press release | link to press release |
| Factmaps in new window | link to map |
| Main area | NORTH SEA |
| Well name | 16/1-24 |
| Seismic location | LN12M02.inline 2619 & crossline 4678 |
| Production licence | 338_C |
| Drilling operator | Lundin Norway AS |
| Drill permit | 1553-L |
| Drilling facility | ISLAND INNOVATOR |
| Drilling days | 30 |
| Entered date | 14.02.2015 |
| Completed date | 16.03.2015 |
| Release date | 16.03.2017 |
| Publication date | 16.03.2017 |
| Purpose - planned | WILDCAT |
| Reentry | NO |
| Content | DRY |
| Discovery wellbore | NO |
| Kelly bushing elevation [m] | 30.0 |
| Water depth [m] | 106.0 |
| Total depth (MD) [m RKB] | 2299.0 |
| Final vertical depth (TVD) [m RKB] | 2299.0 |
| Maximum inclination [°] | 0.7 |
| Oldest penetrated age | LATE JURASSIC |
| Oldest penetrated formation | HUGIN FM |
| Geodetic datum | ED50 |
| NS degrees | 58° 46' 45.59" N |
| EW degrees | 2° 6' 35.01" E |
| NS UTM [m] | 6515972.54 |
| EW UTM [m] | 448523.16 |
| UTM zone | 31 |
| NPID wellbore | 7616 |



Wellbore history

General

Well 16/1-24 was drilled to test the Gemini prospect on the Gudrun Terrace west-south-west of the Edvard Grieg Field in the North Sea. The primary objective was to test the hydrocarbon potential in the Paleocene Ty Formation

Operations and results

Wildcat well 16/1-24 was spudded with the semi-submersible installation Island Innovator on 14 February 2015 and drilled to TD at 2299 m in the Late Jurassic Hugin Formation. No significant problem was encountered in the operations. The well was drilled with seawater and hi-vis pills down to 600 m and with Aquadril mud from 600 m to TD.

The target Ty Formation came in at 2116 m. The Ty Formation consisted of a 30-metre thick sandstone with an average porosity of 26.7% and a net/gross of 0.984. The well also encountered a ca 30-metre thick Intra Draupne Formation sandstone of very good reservoir quality and a ca 120-metre thick sandstone-dominated interval in the Heather formation with good to poor reservoir quality. Pressure points in Paleocene and Late Jurassic were below hydrostatic, indicating pressure depletion in the area. All reservoirs are water bearing. No oil shows were observed in the well.

No cores were cut and no fluid sample was taken.

The well was permanently abandoned on 16 March 2015 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] |
|----------------------------------|-----------------------------------|
| 610.00 | 2299.00 |
| Cuttings available for sampling? | YES |

Lithostratigraphy

| Top depth [mMD RKB] | Lithostrat. unit |
|------------------------|----------------------------------|
| 135 | NORDLAND GP |
| 135 | UNDIFFERENTIATED |
| 220 | NO FORMAL NAME |
| 320 | UNDIFFERENTIATED |
| 742 | UTSIRA FM |



| | |
|------|-------------------------------------|
| 969 | UNDIFFERENTIATED |
| 1076 | HORDALAND GP |
| 1076 | UNDIFFERENTIATED |
| 1091 | SKADE FM |
| 1160 | UNDIFFERENTIATED |
| 1172 | NO FORMAL NAME |
| 1626 | NO FORMAL NAME |
| 1666 | GRID FM |
| 1747 | NO FORMAL NAME |
| 1960 | ROGALAND GP |
| 1960 | BALDER FM |
| 1980 | SELE FM |
| 2041 | LISTA FM |
| 2066 | HEIMDAL FM |
| 2067 | LISTA FM |
| 2088 | VÅLE FM |
| 2112 | UNDIFFERENTIATED |
| 2116 | TY FM |
| 2147 | VÅLE FM |
| 2150 | VIKING GP |
| 2150 | INTRA DRAUPNE FM SS |
| 2198 | DRAUPNE FM |
| 2223 | INTRA HEATHER FM SS |
| 2282 | HEATHER FM |
| 2290 | VESTLAND GP |
| 2290 | HUGIN FM |

Logs

| Log type | Log top depth [m] | Log bottom depth [m] |
|----------------------------------|-------------------|----------------------|
| BG PWD GR RES DIR DEN CAL NEU SO | 1923 | 2299 |
| DIR GR PWD | 206 | 600 |
| DIR PWD | 206 | 600 |
| GR PWD RES DIR SON | 135 | 203 |
| GR RES PWD DIR CAL DEN NEU SON | 605 | 1950 |
| MSCT | 1268 | 1298 |
| VSP | 0 | 1172 |
| XPT | 1091 | 1091 |



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 | 201.4 | 36 | 206.0 | 0.00 | |
| SURF.COND. | 20 | 594.0 | 26 | 600.0 | 1.55 | FIT |
| PILOT HOLE | | 600.0 | 9 7/8 | 600.0 | 0.00 | |
| INTERM. | 9 5/8 | 1946.0 | 12 1/4 | 1954.0 | 1.71 | LOT |
| OPEN HOLE | | 2299.0 | 8 1/2 | 2299.0 | 0.00 | |

Drilling mud

| Depth MD [m] | Mud weight [g/cm3] | Visc. [mPa.s] | Yield point [Pa] | Mud type | Date measured |
|-----------------|--------------------------|------------------|---------------------|-------------|------------------|
| 135 | 1.00 | 1.0 | | Water Based | |
| 179 | 1.04 | 56.0 | | Water Based | |
| 206 | 1.40 | 25.0 | | Water Based | |
| 206 | 1.04 | 15.0 | | Water Based | |
| 500 | 1.36 | 18.0 | | Water Based | |
| 600 | 1.40 | 16.0 | | Water Based | |
| 600 | 1.30 | 11.0 | | Water Based | |
| 600 | 1.03 | 1.0 | | Water Based | |
| 600 | 1.50 | 17.0 | | Water Based | |
| 1790 | 1.25 | 12.0 | | Water Based | |
| 1954 | 1.35 | 17.0 | | Water Based | |
| 2300 | 1.25 | 14.0 | | Water Based | |