

**General information**

|                              |                                 |
|------------------------------|---------------------------------|
| Wellbore name                | 2/8-4                           |
| Type                         | EXPLORATION                     |
| Purpose                      | APPRAISAL                       |
| Status                       | P&A                             |
| Factmaps in new window       | <a href="#">link to map</a>     |
| Main area                    | NORTH SEA                       |
| Field                        | <a href="#">VALHALL</a>         |
| Discovery                    | <a href="#">2/8-6 Valhall</a>   |
| Well name                    | 2/8-4                           |
| Seismic location             | LINE 66-53 SP.8599-SP.8313      |
| Production licence           | <a href="#">006</a>             |
| Drilling operator            | Amoco Norway Oil Company        |
| Drill permit                 | 83-L                            |
| Drilling facility            | <a href="#">ZAPATA EXPLORER</a> |
| Drilling days                | 41                              |
| Entered date                 | 28.04.1973                      |
| Completed date               | 07.06.1973                      |
| Release date                 | 07.06.1975                      |
| Publication date             | 10.10.2012                      |
| Purpose - planned            | APPRAISAL                       |
| Reentry                      | NO                              |
| Content                      | OIL                             |
| Discovery wellbore           | NO                              |
| 1st level with HC, age       | LATE CRETACEOUS                 |
| 1st level with HC, formation | HOD FM                          |
| Kelly bushing elevation [m]  | 34.0                            |
| Water depth [m]              | 70.0                            |
| Total depth (MD) [m RKB]     | 2852.0                          |
| Bottom hole temperature [°C] | 86                              |
| Oldest penetrated age        | EARLY CRETACEOUS                |
| Oldest penetrated formation  | RØDBY FM                        |
| Geodetic datum               | ED50                            |
| NS degrees                   | 56° 17' 53.8" N                 |
| EW degrees                   | 3° 20' 38.06" E                 |
| NS UTM [m]                   | 6239469.40                      |
| EW UTM [m]                   | 521284.15                       |
| UTM zone                     | 31                              |
| NPDID wellbore               | 273                             |

**Wellbore history****General**

Well 2/8-4 was drilled on the Valhall structure in the Southern North Sea

**Operations and results**

Wildcat well 2/8-4 was spudded with the jack-up installation Zapata Explorer on 28 April 1973 and drilled to TD at 2852 m.

Top Shetland Group was encountered with oil shows at 2577 m. The Shetland Group had only one meter of Tor Formation on top of the Hod Formation.

Three very short cores were cut: core 1 from 2607.3 to 2698.2 m, core 2 from 2597.8 to 2598.7 m, and core 3 from 2584.1 m to 2585 m. No wire line fluid samples were taken.

The well was permanently abandoned on 7 June 1973, initially as a dry well with shows. After the 2/8-6 Valhall discovery well two years later it was re-classified to oil appraisal well.

**Testing**

Two drill stem tests were performed. In both tests the chalk was stimulated by acid.

DST 1 tested the interval 2603 to 2622.5 m. The test produced 5.7 m3 load water during a 6.5 hrs flow

DST 2 tested the interval 2578.6 to 2587.8 m. This test produced 2.5 m3 load water and 0.5 Sm3 26 deg API oil during a 12 hrs flow.

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**Cuttings at the Norwegian Offshore Directorate**

| Cutting sample, top depth [m] | Cutting samples, bottom depth [m] |
|-------------------------------|-----------------------------------|
| 164.59                        | 2849.88                           |

|                                  |     |
|----------------------------------|-----|
| Cuttings available for sampling? | YES |
|----------------------------------|-----|

**Palynological slides at the Norwegian Offshore Directorate**

| Sample depth | Depth unit | Sample type | Laboratory |
|--------------|------------|-------------|------------|
| 2831.6       | [m]        | DC          | HRS        |
| 2840.7       | [m]        | DC          | HRS        |
| 2849.9       | [m]        | DC          | HRS        |

**Lithostratigraphy**



| Top depth<br>[mMD RKB] | Lithostrat. unit                |
|------------------------|---------------------------------|
| 104                    | <a href="#">NORDLAND GP</a>     |
| 2533                   | <a href="#">ROGALAND GP</a>     |
| 2533                   | <a href="#">BALDER FM</a>       |
| 2543                   | <a href="#">SELE FM</a>         |
| 2577                   | <a href="#">SHETLAND GP</a>     |
| 2577                   | <a href="#">HOD FM</a>          |
| 2774                   | <a href="#">BLODØKS FM</a>      |
| 2778                   | <a href="#">HIDRA FM</a>        |
| 2780                   | <a href="#">CROMER KNOLL GP</a> |
| 2780                   | <a href="#">RØDBY FM</a>        |

**Documents - older Norwegian Offshore Directorate WDSS reports and other related documents**

| Document name                                   | Document<br>format | Document size<br>[MB] |
|-------------------------------------------------|--------------------|-----------------------|
| <a href="#">273_01_WDSS_General_Information</a> | pdf                | 0.24                  |

**Documents - reported by the production licence (period for duty of secrecy expired)**

| Document name                           | Document<br>format | Document size<br>[MB] |
|-----------------------------------------|--------------------|-----------------------|
| <a href="#">273_2_8_4_Completionlog</a> | pdf                | 1.39                  |

**Drill stem tests (DST)**

| Test<br>number | From depth MD<br>[m] | To depth MD<br>[m] | Choke size<br>[mm] |
|----------------|----------------------|--------------------|--------------------|
| 1.0            | 2603                 | 2622               | 25.4               |
| 2.0            | 2579                 | 2588               | 25.4               |

| Test<br>number | Final shut-in<br>pressure<br>[MPa] | Final flow pressure<br>[MPa] | Bottom hole<br>pressure<br>[MPa] | Downhole<br>temperature<br>[°C] |
|----------------|------------------------------------|------------------------------|----------------------------------|---------------------------------|
| 1.0            |                                    |                              |                                  |                                 |
| 2.0            |                                    |                              |                                  |                                 |





| Test number | Oil [Sm3/day] | Gas [Sm3/day] | Oil density [g/cm3] | Gas grav. rel.air | GOR [m3/m3] |
|-------------|---------------|---------------|---------------------|-------------------|-------------|
| 1.0         |               |               |                     |                   |             |
| 2.0         |               |               |                     |                   |             |

**Logs**

| Log type | Log top depth [m] | Log bottom depth [m] |
|----------|-------------------|----------------------|
| BHC      | 1585              | 2850                 |
| CBL      | 305               | 1585                 |
| CBL      | 1524              | 2518                 |
| CBL      | 2469              | 2713                 |
| CDM      | 2518              | 2805                 |
| CDM AP   | 1586              | 2306                 |
| CDM AP   | 2514              | 2808                 |
| CNL      | 2713              | 2725                 |
| DL       | 2560              | 2802                 |
| FDC      | 2518              | 2805                 |
| FDC CNL  | 2518              | 2805                 |
| IES      | 1586              | 2794                 |
| LL       | 2560              | 2802                 |
| PML      | 2560              | 2802                 |
| SDM      | 1586              | 2306                 |

**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                  | 147.0            | 36                | 147.0          | 0.00                     | LOT                 |
| SURF.COND.  | 20                  | 373.0            | 26                | 384.0          | 0.00                     | LOT                 |
| INTERM.     | 13 3/8              | 1585.0           | 17 1/2            | 1601.0         | 0.00                     | LOT                 |
| INTERM.     | 9 5/8               | 2519.0           | 12 1/4            | 2551.0         | 0.00                     | LOT                 |
| LINER       | 7                   | 2750.0           | 8 1/2             | 2852.0         | 0.00                     | LOT                 |

**Drilling mud**



| Depth<br>MD [m] | Mud<br>weight<br>[g/cm3] | Visc.<br>[mPa.s] | Yield point<br>[Pa] | Mud type   | Date<br>measured |
|-----------------|--------------------------|------------------|---------------------|------------|------------------|
| 1450            | 1.55                     |                  |                     | waterbased |                  |
| 1609            | 1.53                     |                  |                     | waterbased |                  |
| 2438            | 1.67                     |                  |                     | waterbased |                  |
| 2564            | 1.75                     |                  |                     | waterbased |                  |
| 2850            | 1.77                     |                  |                     | waterbased |                  |