## General information

| | |
|---|---|
| Wellbore name | 25/11-2 |
| Type | EXPLORATION |
| Purpose | APPRAISAL |
| Status | P&A |
| Factmaps in new window | link to map |
| Main area | NORTH SEA |
| Field | BALDER |
| Discovery | 25/11-1 Balder |
| Well name | 25/11-2 |
| Seismic location | LINE SC 72 & sp 6660 |
| Production licence | 001 |
| Drilling operator | Esso Exploration and Production Norway A/S |
| Drill permit | 47-L |
| Drilling facility | GLOMAR GRAND ISLE |
| Drilling days | 12 |
| Entered date | 13.09.1970 |
| Completed date | 24.09.1970 |
| Release date | 24.09.1972 |
| Publication date | 30.04.2010 |
| Purpose - planned | APPRAISAL |
| Reentry | NO |
| Content | SHOWS |
| Discovery wellbore | NO |
| Kelly bushing elevation [m] | 10.0 |
| Water depth [m] | 130.0 |
| Total depth (MD) [m RKB] | 1824.0 |
| Final vertical depth (TVD) [m RKB] | 1824.0 |
| Bottom hole temperature [°C] | 61 |
| Oldest penetrated age | PALEOCENE |
| Oldest penetrated formation | SELE FM |
| Geodetic datum | ED50 |
| NS degrees | 59° 13' 0.5'' N |
| EW degrees | 2° 24' 33.35'' E |
| NS UTM [m] | 6564495.02 |
| EW UTM [m] | 466273.05 |
| UTM zone | 31 |
| NPDID wellbore | 184 |

## Wellbore history

**General**

Well 25/11-2 was drilled to appraise the 25/11-1 Balder discovery on the Utsira High in the North Sea. The objective was to define the continuity and reservoir thickness of the Early Eocene oil bearing sands in a northward direction from well 25/11-1 and a southward direction from well 25/8-1.

**Operations and results**

Appraisal well 25/11-2 was spudded with the vessel Glomar Grand Isle on 13 September 1970 and drilled to TD at 1823 m in the Paleocene Sele Formation. No significant problems occurred during the operations. The well was drilled with seawater/gel down to 175 m, with seawater/Spersene/ XP-20/Salinex from 175 m to 945 m, and with fresh water/ Spersene/XP-20 from 945 to TD.

The well penetrated the Utsira Formation and several Skade Formation sand units and then entered a ca 600 m thick section of shales belonging to the lower Hordaland Group before top Balder formation was encountered at 1699 m. The Balder Formation contained several thin Intra Balder Formation sandstones, of which a seven meter thick sandstone at 1727 m was the thickest. The sands were oil bearing down to 1747 m. Hermod sandstones were penetrated from 1780 to 1817 m. They had better reservoir properties than the Intra Balder Formation sands, but were water bearing without shows.

No conventional cores were cut in the well. Out of four attempts with the Formation Interval Tester (FIT) three tests were seal failures while test no 4, at 1728.5 m, was successful and recovered 0.33 Sm3 gas, 6.9 l oil, and 3.25 l oil and gas cut mud.

The well was permanently abandoned on 24 September as an oil appraisal.

**Testing**

No drill stem test was performed.

## Cuttings at the Norwegian Offshore Directorate

| Cutting sample, top depth [m] | Cutting samples, bottom depth [m] |
|---|---|
| 405.38 | 1822.71 |

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

## Palynological slides at the Norwegian Offshore Directorate

| Sample depth | Depth unit | Sample type | Laboratory |
|---|---|---|---|
| 3000.0 | [ft] | DC | |
| 3090.0 | [ft] | DC | |
| 3180.0 | [ft] | DC | |

| | | | |
|---|---|---|---|
| 3300.0 | [ft] | DC | |
| 3390.0 | [ft] | DC | |
| 3480.0 | [ft] | DC | |
| 3600.0 | [ft] | DC | |
| 3690.0 | [ft] | DC | |
| 3780.0 | [ft] | DC | |
| 3900.0 | [ft] | DC | |
| 3990.0 | [ft] | DC | |
| 4080.0 | [ft] | DC | |
| 4170.0 | [ft] | DC | |
| 4290.0 | [ft] | DC | |
| 4380.0 | [ft] | DC | |
| 4500.0 | [ft] | DC | |
| 4590.0 | [ft] | DC | |
| 4680.0 | [ft] | DC | |
| 4770.0 | [ft] | DC | |
| 4890.0 | [ft] | DC | |
| 4980.0 | [ft] | DC | |
| 5100.0 | [ft] | DC | |
| 5190.0 | [ft] | DC | |
| 5300.0 | [ft] | DC | |
| 5320.0 | [ft] | DC | |
| 5360.0 | [ft] | DC | |
| 5400.0 | [ft] | DC | |
| 5440.0 | [ft] | DC | |
| 5460.0 | [ft] | DC | |
| 5480.0 | [ft] | DC | |
| 5500.0 | [ft] | DC | |
| 5520.0 | [ft] | DC | |
| 5539.0 | [ft] | SWC | |
| 5554.0 | [ft] | SWC | |
| 5560.0 | [ft] | SWC | |
| 5580.0 | [ft] | DC | |
| 5583.0 | [ft] | SWC | |
| 5640.0 | [ft] | SWC | |
| 5654.0 | [ft] | SWC | |
| 5670.0 | [ft] | DC | |
| 5722.0 | [ft] | SWC | |
| 5740.0 | [ft] | SWC | |
| 5776.0 | [ft] | SWC | |

| | | | |
|---|---|---|---|
| 5788.0 | [ft] | SWC | |
| 5790.0 | [ft] | DC | |
| 5800.0 | [ft] | SWC | |
| 5828.0 | [ft] | SWC | |
| 5862.0 | [ft] | SWC | |
| 5880.0 | [ft] | DC | |
| 5970.0 | [ft] | SWC | |
| 5970.0 | [ft] | DC | |

**Lithostratigraphy**

| Top depth [mMD RKB] | Lithostrat. unit |
|---|---|
| 140 | NORDLAND GP |
| 582 | UTSIRA FM |
| 716 | NO FORMAL NAME |
| 747 | HORDALAND GP |
| 747 | SKADE FM |
| 939 | NO FORMAL NAME |
| 997 | SKADE FM |
| 1015 | NO FORMAL NAME |
| 1086 | SKADE FM |
| 1092 | NO FORMAL NAME |
| 1699 | ROGALAND GP |
| 1699 | BALDER FM |
| 1727 | INTRA BALDER FM SS |
| 1734 | BALDER FM |
| 1765 | SELE FM |
| 1780 | HERMOD FM |
| 1817 | SELE FM |

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

| Document name | Document format | Document size [MB] |
|---|---|---|
| 184_01_WDSS_General_Information | pdf | 0.15 |

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

| Document name | Document format | Document size [MB] |
|---|---|---|
| 184_01_25_11_2_Completion_log | pdf | 1.01 |
| 184_01_25_11_2_Completion_Report | pdf | 3.20 |

### Documents - Norwegian Offshore Directorate papers

| Document name | Document format | Document size [MB] |
|---|---|---|
| 184_01_NPD_Paper_No.28_Lithology_Balder_area__Well_25_11_2 | pdf | 18.56 |
| 184_02_NPD_Paper_No.28_Lithologic_Correlation_chart__Well_25_11_2 | pdf | 0.48 |
| 184_03_NPD_Paper_No.28_Log_Correlation_chart_Profile_NE-SW__Well_25_11_2 | pdf | 0.41 |

### Logs

| Log type | Log top depth [m] | Log bottom depth [m] |
|---|---|---|
| FDC | 944 | 1822 |
| GR | 137 | 944 |
| IEL | 944 | 1823 |
| NHC SON GR | 944 | 1819 |
| VELOCITY | 944 | 1824 |

### 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 | 175.0 | 36 | 180.0 | 0.00 | LOT |
| SURF.COND. | 13 3/8 | 388.0 | 17 1/2 | 405.0 | 0.00 | LOT |
| INTERM. | 9 5/8 | 945.0 | 12 1/4 | 960.0 | 0.00 | LOT |
| OPEN HOLE | | 1856.0 | 8 1/2 | 1856.0 | 0.00 | LOT |

### Drilling mud

| Depth MD [m] | Mud weight [g/cm3] | Visc. [mPa.s] | Yield point [Pa] | Mud type | Date measured |
|---|---|---|---|---|---|
| 175 | 0.00 | | | seawater/ge | |
| 945 | 0.00 | | | seawater/sp | |

| | | | | | |
|---|---|---|---|---|---|
| 1823 | 0.00 | | | water/spers | |

**Pressure plots**

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

| Document name | Document format | Document size [MB] |
|---|---|---|
| 184_Formation_pressure_(Formasjonstrykk) | pdf | 0.18 |