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General information

| Wellbore name | 2/8-1 |
|------------------------------------|--------------------------|
| Туре | EXPLORATION |
| Purpose | WILDCAT |
| Status | P&A |
| Factmaps in new window | link to map |
| Main area | NORTH SEA |
| Well name | 2/8-1 |
| Seismic location | LINE 70 - 17. |
| Production licence | 006 |
| Drilling operator | Amoco Norway Oil Company |
| Drill permit | 7-L |
| Drilling facility | DRILLSHIP |
| Drilling days | 218 |
| Entered date | 28.11.1967 |
| Completed date | 02.07.1968 |
| Release date | 02.07.1970 |
| Publication date | 18.01.2007 |
| Purpose - planned | WILDCAT |
| Reentry | NO |
| Content | OIL SHOWS |
| Discovery wellbore | NO |
| Kelly bushing elevation [m] | 17.0 |
| Water depth [m] | 69.0 |
| Total depth (MD) [m RKB] | 2595.0 |
| Final vertical depth (TVD) [m RKB] | 2594.0 |
| Maximum inclination [°] | 7.75 |
| Bottom hole temperature [°C] | 57 |
| Oldest penetrated age | EOCENE |
| Oldest penetrated formation | HORDALAND GP |
| Geodetic datum | ED50 |
| NS degrees | 56° 17' 47.2" N |
| EW degrees | 3° 26' 59.7" E |
| NS UTM [m] | 6239303.15 |
| EW UTM [m] | 527846.41 |
| UTM zone | 31 |
| NPDID wellbore | 124 |



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Wellbore history

General

Well 2/8-1 was the eighth, and at the time the most southerly exploration well to be drilled in Norwegian waters. The geological objective of the well, in this early stage of exploration, was to test all horizons down to the Permian Rotliegendes Group. The well also had as a technical objective to test the use of a large, single hull vessel for drilling in the North Sea.

Operations and results

Well 2/8-1 was spudded with the vessel "Drillship" on 28 November 1967. This was the first drilling operation in Norwegian waters in which a vessel was used. Many problems arose during the drilling of 2/8-1. Repeated failures of the anchor mooring chains at tensions loads of only 10?50 % of their rated breaking occurred. To this, the weather conditions in the North Sea turned out to be more severe than had been predicted. Several storms in the 25 to 30 year category were encountered, and in January a storm that would be expected once every 75?100 years occurred with maximum waves of 15 - 17 m. After this storm the Drillship was in shipyard for repairs and modifications from 19 January to 8 March 1968. Even so, these failures of anchor chains eventually resulted in failure of the BOP stack and 13 3/8" well head after having drilled to 2595 m, and made clear that drilling could not continue safely.

Besides the mooring problems, other difficulties occurred. While testing in the 12 1/4" hole, the Drill Stem Test (DST) - tool dropped into the hole. The hole was reamed and the fish retrieved. The drill pipe stuck twice when making trips, first at 2118 m. The pipe was not recovered and a fish was left from 2007 - 2118 m. A cement plug was set and the hole side tracked. The pipe stuck again at 2237 m and a new fish was left from 2052 to 2237 m. Two cement plugs were set, one in the 13 3/8" casing shoe and one in the casing from 140 m to sea floor. This occurred in connection with the BOP and wellhead break, and the well was abandoned with TD at 2595 m in Eocene sediments. The well was drilled with bentonite and salt gel down to 351 m, and with bentonite / salt gel / lignite / lignosulphonate from 351 m to TD. Diesel was added to the mud from 2023 m to TD.

Non-commercial hydrocarbon shows were encountered at 902 - 927 m in Miocene sand stringers. Due to the early termination of the well the main geological objectives were not reached.

No cores were cut. An attempt to run a wire line Formation Tester at 927 m failed due to poor hole conditions. No logs were run below 2024 m due to severe hole problems.

The well was permanently abandoned on 2 July 1968 as a dry well with shows.

Testing

No drill stem test was performed

Lithostratigraphy

| Top depth [mMD RKB] | Lithostrat. unit |
|------------------------|------------------|
| 87 | NORDLAND GP |



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1105 HORDALAND GP

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

| Document name | Document format | Document size [MB] |
|---------------------------------|-----------------|--------------------|
| 124 01 WDSS General Information | pdf | 0.19 |

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

| Document name | Document format | Document size [MB] |
|--|-----------------|--------------------|
| 124 01 2 8 1 Completion Report | pdf | 3.18 |
| 124 02 2 8 1 Completion log.1 | pdf | 1.74 |
| 124 2 8 1 plus Correlation charts Valhall wells | pdf | 28.99 |
| 124 2 8 1 plus Valhall Hod Biostratigraphic Reappraisal and Correlation Study vol 1 o f 2 1984 | pdf | 4.81 |
| 124 2 8 1 plus Valhall Hod Biostratigraphic Reappraisal and Correlation Study vol 2 o f 2 1984 | pdf | 12.77 |

Documents - Norwegian Offshore Directorate papers

| Document name | Document format | Document size [MB] |
|--|-----------------|--------------------|
| 124 01 NPD Paper No.7 Lithology Well 2 8 1 | pdf | 12.73 |
| 124 02 NPD Paper No.7 Interpreted Litholo gy log Well 2 8 1 | pdf | 39.33 |

Logs

| Log type | Log top depth [m] | Log bottom depth [m] |
|----------|----------------------|-------------------------|
| FDC | 325 | 2024 |
| GR | 86 | 325 |
| IES | 325 | 2023 |
| LL-7 | 325 | 1923 |
| MLL-C | 326 | 1922 |

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| SGR-C | 325 | 2021 |
|----------|-----|------|
| SNP | 325 | 1923 |
| VELOCITY | 327 | 2596 |

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 | 144.0 | 36 | 159.0 | 0.00 | LOT |
| SURF.COND. | 20 | 327.0 | 26 | 351.0 | 0.00 | LOT |
| INTERM. | 13 3/8 | 1693.0 | 17 1/2 | 1701.0 | 0.00 | LOT |
| OPEN HOLE | | 2596.0 | 12 1/4 | 2596.0 | 0.00 | LOT |

Drilling mud

| Depth MD [m] | Mud weight [g/cm3] | [mPa.s] | Yield point [Pa] | Mud type | Date measured |
|-----------------|--------------------------|---------|---------------------|------------|------------------|
| 338 | 0.00 | | | seawater | |
| 609 | 1.11 | 50.0 | | waterbased | |
| 1524 | 1.20 | 55.0 | | waterbased | |
| 2400 | 1.22 | 55.0 | | waterbased | |