General information

Wellbore name	2/8-1
Type	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.
Drilling operator	Amoco Norway Oil Company
Drill permit	7-L
Production licence	006
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

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

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_of_2_1984	pdf	4.81
124_2_8_1_plus_Valhall_Hod_Biostratigraphic_Reappraisal_and_Correlation_Study_vol_2_of_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_Lithology_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

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]	Visc. [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	