

**General information**

Wellbore name	9/8-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	9/8-1
Seismic location	C 284 SP: 36142.
Production licence	003
Drilling operator	Esso Exploration and Production Norway A/S
Drill permit	5-L
Drilling facility	ENDEAVOUR
Drilling days	38
Entered date	23.05.1968
Completed date	29.06.1968
Release date	29.06.1970
Publication date	25.04.2005
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	30.0
Water depth [m]	68.0
Total depth (MD) [m RKB]	2176.0
Maximum inclination [°]	4
Bottom hole temperature [°C]	75
Oldest penetrated age	LATE PERMIAN
Oldest penetrated formation	ZECHSTEIN GP
Geodetic datum	ED50
NS degrees	57° 20' 33.97" N
EW degrees	4° 20' 12.98" E
NS UTM [m]	6356476.03
EW UTM [m]	580468.98
UTM zone	31
NPDID wellbore	145



Wellbore history

General

The 9/8-1 well is located in the central western part of the Norwegian-Danish Basin in the North Sea. The objective was to test the hydrocarbon potential of the sedimentary section present on the crest of a closed seismic structure interpreted to be a salt pillow. Prospective reservoir sands were anticipated towards the base of the Tertiary, in the Early Cretaceous and in the Early Triassic.

Operations and results

Wildcat well 9/8-1 was spudded with the jack-up installation Endeavour on 23 May 1968 and drilled to TD at 2176 m in the Late Permian Zechstein Group. It was the first well drilled in Norwegian waters with a jack-up platform. After the 36" conductor was set at 137 m, the hole was drilled with a 17 1/2" bit to 411 m. While reaming the hole to 26", cavings and fill of shell fragments and gravel caused problems from about 300 m, necessitating the 20" casing to be set high at 360 m. The only additional drilling problem of note was a twist off while drilling at 1546 m. The fish was recovered in a few hours without difficulty. From here, operations were successfully carried out to TD. Initial drilling from the sea floor to 1350 feet was with seawater and gel without casing. Returns were to the sea floor. Below 1350 to TD at 7138 feet, a Spersene, XP-20, Salinex mud with up to 10 % diesel oil was used.

The interpreted salt pillow structure was found to be a piercement which breached the Triassic with the result that the

Triassic Bunter sand section was not present in this well. Top Permian Zechstein evaporites at 2109 m were immediately overlain by the Middle Jurassic Dogger formation. The Dogger contained some porous sandstones (Sandnes Formation) but these had only weak shows in the uppermost few feet and the logs indicated high water saturation. Both the Lower Cretaceous and the entire Tertiary section consisted mainly of clays. No sands were developed at the base of either the Lower Cretaceous or the Tertiary Eocene. Immature shales with good to excellent source rock properties were penetrated in the Late Jurassic. Two conventional cores were cut, from 1926 m to 1933.3 m in the Sandnes Formation and 2114.1 m to 2130.6 m in the Zechstein Group. Fluid sampling with the FIT tool at 2061.1 m, 2061.7 m, 1991.9 m, and at 1926.3 m. The two first of these were seal failures and recovered traces of sand together with mud, the third recovered only mud in a tight formation, the fourth successfully recovered formation water and some mud. No hydrocarbons were reported in any of the samples.

The well was permanently abandoned on 29 June 1968 as a dry hole with shows.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1410.00	7138.00

Cuttings available for sampling?	YES
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**Cores at the Norwegian Offshore Directorate**

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	1926.0	1933.4	[m]
2	2114.0	2130.6	[m]

Total core sample length [m]	23.9
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
2490.0	[ft]	DC	
2520.0	[ft]	DC	
2580.0	[ft]	DC	
2670.0	[ft]	DC	
2760.0	[ft]	DC	
2910.0	[ft]	DC	
2970.0	[ft]	DC	
3000.0	[ft]	DC	
3120.0	[ft]	DC	
3150.0	[ft]	DC	
3180.0	[ft]	DC	
3210.0	[ft]	DC	
3360.0	[ft]	DC	
3390.0	[ft]	DC	
3420.0	[ft]	DC	
3510.0	[ft]	DC	
3540.0	[ft]	DC	
3630.0	[ft]	DC	
3660.0	[ft]	DC	
3720.0	[ft]	DC	
3750.0	[ft]	DC	
3780.0	[ft]	DC	
3810.0	[ft]	DC	
3840.0	[ft]	DC	
3870.0	[ft]	DC	
3900.0	[ft]	DC	
3930.0	[ft]	DC	



3990.0 [ft]	DC	
4020.0 [ft]	DC	
4080.0 [ft]	DC	
4140.0 [ft]	DC	
4170.0 [ft]	DC	
4200.0 [ft]	DC	
4210.0 [ft]	DC	
4250.0 [ft]	DC	
4260.0 [ft]	DC	
4300.0 [ft]	DC	
4310.0 [ft]	DC	
4400.0 [ft]	DC	
4500.0 [ft]	DC	
4600.0 [ft]	DC	
4700.0 [ft]	DC	
4800.0 [ft]	DC	
4900.0 [ft]	DC	
5000.0 [ft]	DC	
5100.0 [ft]	DC	
5200.0 [ft]	DC	
5240.0 [ft]	DC	
5260.0 [ft]	DC	
5270.0 [ft]	SWC	
5280.0 [ft]	DC	
5300.0 [ft]	DC	
5320.0 [ft]	DC	
5400.0 [ft]	DC	
5420.0 [ft]	DC	
5500.0 [ft]	DC	
5515.0 [ft]	SWC	
5600.0 [ft]	DC	
5700.0 [ft]	DC	
5761.0 [ft]	SWC	
5800.0 [ft]	DC	
5900.0 [ft]	DC	
5920.0 [ft]	SWC	
5920.0 [ft]	DC	
5960.0 [ft]	DC	
6000.0 [ft]	DC	
6020.0 [ft]	DC	



6050.0 [ft]	SWC	
6100.0 [ft]	DC	
6120.0 [ft]	DC	
6160.0 [ft]	DC	
6190.0 [ft]	SWC	
6200.0 [ft]	DC	
6270.0 [ft]	SWC	
6300.0 [ft]	DC	
6320.0 [ft]	DC	
6320.0 [ft]	DC	
6322.0 [ft]	C	STRATLAB
6323.0 [ft]	DC	
6325.0 [ft]	C	STRATLAB
6328.0 [ft]	C	STRATL
6331.0 [ft]	C	STRATL
6334.0 [ft]	C	STRATL
6334.0 [ft]	DC	
6337.0 [ft]	C	STRATLAB
6339.0 [ft]	DC	
6340.0 [ft]	C	STRATLAB
6343.0 [ft]	C	STRATL
6358.0 [ft]	SWC	
6400.0 [ft]	DC	
6400.0 [ft]	SWC	
6445.0 [ft]	SWC	
6500.0 [ft]	DC	
6540.0 [ft]	SWC	
6574.0 [ft]	SWC	
6600.0 [ft]	DC	
6700.0 [ft]	DC	
6715.0 [ft]	SWC	
6760.0 [ft]	SWC	
6800.0 [ft]	DC	
6900.0 [ft]	DC	
6925.0 [ft]	SWC	
7000.0 [ft]	DC	
7100.0 [ft]	DC	
7138.0 [ft]	DC	

**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
98	NORDLAND GP
568	HORDALAND GP
1120	ROGALAND GP
1120	BALDER FM
1140	SELE FM
1177	LISTA FM
1233	VÅLE FM
1275	SHETLAND GP
1275	EKOFISK FM
1300	TOR FM
1530	HOD FM
1597	BLODØKS FM
1625	CROMER KNOLL GP
1625	RØDBY FM
1695	ÅSGARD FM
1777	BOKNEFJORD GP
1777	BØRGLUM UNIT
1825	EGERSUND FM
1922	VESTLAND GP
1922	SANDNES FM
2109	ZECHSTEIN GP

Composite logs

Document name	Document format	Document size [MB]
145	pdf	0.24

Geochemical information

Document name	Document format	Document size [MB]
145_1	pdf	4.43
145_2	pdf	0.39



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

Document name	Document format	Document size [MB]
145_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]
145_01_Completion_Report_and_Completion_log	pdf	3.96

Documents - Norwegian Offshore Directorate papers

Document name	Document format	Document size [MB]
145_01_NPD_Paper_No.5_Lithology_Well_9_8_1	pdf	10.85
145_02_NPD_Paper_No.5_Interpreted_Lithology_log_Well_9_8_1	pdf	40.26

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CDM	1266	2131
FDC	1266	2133
GR	30	360
IES	360	2133
MLL-C	416	2133
SGR-C	360	2130
TS	44	1252

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	36	138.0	48	145.0	0.00	LOT
SURF.COND.	20	360.0	26	412.0	0.00	LOT





INTERM.	13 3/8	1265.0	17 1/2	1279.0	0.00	LOT
OPEN HOLE		2176.0	12 1/4	2176.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
137	0.00			seawater	
360	1.11			seawater	
1219	1.13			waterbased	
2175	1.15			waterbased	

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]
145 Formation pressure (Formasjonstrykk)	pdf	0.22

