

**General information**

Wellbore name	8/9-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	8/9-1
Seismic location	LINE C8-9-1 SP.44
Production licence	013
Drilling operator	Conoco Norway Inc.
Drill permit	145-L
Drilling facility	OCEAN VICTORY
Drilling days	51
Entered date	22.12.1975
Completed date	10.02.1976
Release date	10.02.1978
Publication date	24.09.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	69.0
Total depth (MD) [m RKB]	2376.0
Bottom hole temperature [°C]	51
Oldest penetrated age	LATE PERMIAN
Oldest penetrated formation	ZECHSTEIN GP
Geodetic datum	ED50
NS degrees	57° 26' 27.28" N
EW degrees	3° 51' 3.48" E
NS UTM [m]	6366931.10
EW UTM [m]	551083.27
UTM zone	31
NPDID wellbore	303

Wellbore history

**General**

Well 8/9-1 is located in the Åsta Graben. It was designed to test a salt structure in the central part of the Norwegian-Danish basin. The primary objective was to penetrate Basal Jurassic unconformity sands in a crestal position of the closure. The sands were estimated to have an approximate gross thickness of 60 m and were expected to be Late Jurassic in age.

The well is Reference Well for the Fiskebank Formation.

Operations and results

Wildcat well 8/9-1 was spudded with the semi-submersible installation Ocean Viking on 22 December 1975 and drilled to TD at 2376 m in the Late Permian Zechstein salt. The well was drilled with salt gel down to 411 m and with a lignosulphonate / gypsum mud from 411 m to TD.

The well penetrated fine-grained silty sandstone very rich in glauconite in the interval 1316 m to 1376 m in Paleocene. Net sand for the interval was 60 m and porosities derived from the density log and corrected for clay effects were in the range 16 % to 24 %. In the interval 2124 m to 2149 m in the Late Jurassic a series of interbedded claystones, siltstones and sandstones were penetrated. The only true sandstone interval here existed between 2147 m and 2149 m where porosities ranged from 7 % to 14% calculated from density - neutron cross plot. All other low GR and permeable intervals in the Late Jurassic section indicated porosities substantially less than this and corresponding sidewall cores showed tight siltstones. In the Middle Jurassic the interval 2168.7 m to 2222.6 m was found to contain a sequence of predominantly interbedded sandstones, siltstones, and claystones with occasional thin carbonaceous beds. The caliper indicated a net sand of approximately 25 m out of a gross interval of 54 m. The porosities in this interval were exceedingly variable from one sandstone unit to the next and ranged from 5 % to 26 %. The sands with the highest porosities occurred near the top of the section between 2171 m and 2175 m. The Zechstein Group was encountered at 2247 m. A thin sand was present overlying the Zechstein Group. This sand was fine-grained grading to siltstone being poorly sorted with some medium sized grains. It was light grey and well cemented with a poor visible porosity.

Hydrocarbons in commercial quantities were not encountered in this well. The only indications were found as gas shows in Miocene-Oligocene limestones. While drilling, the total gas detector showed fairly high contents of methane, in one case measured to more than 20%. These limestones are thought to be slightly overpressured and fractured but occur only as thin 30 cm to 60 cm beds in the 8/9-1 well. No shows were encountered in the Jurassic sandstones, which was the primary objective. A bright spot just east of the well indicated possible gas accumulations in Middle Tertiary sands. The corresponding sand in this well was penetrated at 998 m without any significant increase in background gas.

No conventional core was cut and no fluid sample was taken in the well

The well was permanently abandoned as a dry hole on 10 February 1976.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate



Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
225.55	2374.33

Cuttings available for sampling?	YES
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Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
2020.0	[m]	DC	PETROSTR
2040.0	[m]	DC	PETROS
2060.0	[m]	DC	PETROS
2100.0	[m]	DC	PETROS
2120.0	[m]	DC	PETROS
2140.0	[m]	DC	PETROS
2180.0	[m]	DC	PETROS
2200.0	[m]	DC	PETROS
2220.0	[m]	DC	PETROS
2260.0	[m]	DC	PETROS

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
93	NORDLAND GP
557	HORDALAND GP
1286	ROGALAND GP
1286	BALDER FM
1307	FISKEBANK FM
1399	LISTA FM
1492	SHETLAND GP
1492	EKOFISK FM
1535	TOR FM
1807	HOD FM
1938	CROMER KNOLL GP
1938	RØDBY FM
1953	SOLA FM
1980	ÅSGARD FM
2103	BOKNEFJORD GP
2103	FLEKKEFJORD FM
2123	SAUDA FM
2156	VESTLAND GP



2156	SANDNES FM
2168	BRYNE FM
2247	ZECHSTEIN GP

Composite logs

Document name	Document format	Document size [MB]
303	pdf	0.29

Geochemical information

Document name	Document format	Document size [MB]
303 1	pdf	0.66
303 2 interim report on the geochemistry of conoco norway 8 9 1 well norwegian north sea	pdf	0.82

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

Document name	Document format	Document size [MB]
303 01 WDSS General Information	pdf	0.26

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

Document name	Document format	Document size [MB]
303 1 Completion Report	pdf	4.60

Logs

Log type	Log top depth [m]	Log bottom depth [m]
BGT	166	410
DLL SP GR	980	2254
FDC CNL CAL GR	944	2244





GR	93	410
HDT	991	2245
ISF	402	1007
ISF SONIC SP GR	929	2308
SONIC GR	402	1007

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	166.0	36	166.0	0.00	LOT
SURF.COND.	20	400.0	26	411.0	0.00	LOT
INTERM.	13 3/8	991.0	17 1/2	1005.0	0.00	LOT
OPEN HOLE		2375.0	12 1/4	2375.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
410	1.13	45.0		seawater	
1004	1.25	39.0		seawater	
1391	1.35	49.0		seawater	
1820	1.37	50.0		seawater	
2211	1.37	52.0		seawater	
2375	1.40	51.0		seawater	