

**General information**

Wellbore name	17/11-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	17/11-1
Seismic location	LINE 5812A SP. 85
Production licence	010
Drilling operator	A/S Norske Shell
Drill permit	13-L
Drilling facility	ORION
Drilling days	38
Entered date	24.05.1968
Completed date	30.06.1968
Release date	30.06.1970
Publication date	25.04.2005
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	27.0
Water depth [m]	75.0
Total depth (MD) [m RKB]	3269.0
Final vertical depth (TVD) [m RKB]	3269.0
Maximum inclination [°]	3.25
Bottom hole temperature [°C]	83
Oldest penetrated age	LATE PERMIAN
Oldest penetrated formation	ZECHSTEIN GP
Geodetic datum	ED50
NS degrees	58° 12' 36" N
EW degrees	3° 20' 34.9" E
NS UTM [m]	6452288.88
EW UTM [m]	520158.20
UTM zone	31
NPDID wellbore	906



Wellbore history

General

Well 17/11-1 was drilled close to the western edge of the Sele High in the North Sea. The original objective to test the Tertiary and Mesozoic sequences, was extended to penetrate the Zechstein salt and investigate the underlying formations. This latter could not be reached due to drilling difficulties in the salt.

Operations and results

Wildcat well 17/11-1 was spudded with the jack-up installation Orion on 24 May 1968 and drilled to TD at 3269 m in the Late Permian Zechstein Group. When logging at 1173 m the logging tool got stuck in the "gumbo" section and an inflow of 2 - 5 bbl/hr of salt water occurred. Several of the tools failed to reach the bottom, among these the gamma-ray/sonic logging tool. Therefore a laterolog is included on the final composite log in the interval 1017-1158 m. The pipe stuck when drilling in potassium and magnesium salt (carnallite). Efforts to free the pipe by jarring and spotting Pipelax were unsuccessful. After working the stuck pipe for 19 hours the drill string parted, leaving a bit and junk sub in the hole. An unsuccessful attempt was made to jar the fish free. It was then decided that further efforts to drill to the base of the salt could not be justified. The well was drilled with seawater down to 166 m, a Spersene/XP-20 mud system from 166 m to 2539 m, converting to a salt-saturated mud from 2539 m through salt to TD.

Shetland Group chalk (Ekofisk Formation) came in at 1020 m. Top Cretaceous is set at 1040 m where Tor and Hod chalks extend down to 1447 m. Porosities in the chalks were estimated between 15 % to 25%. At 1447 m 63 m of Ran Sandstone Units were penetrated. The remaining Early Cretaceous consisted of mudstones. The Boknfjord Group was encountered at 2083 m, with shales extending down to 2211 m. These shales rest directly on Triassic sediments. The Skagerrak Formation from 2211 m to 2315 m consisted of claystone with sand and siltstone stringers. The sandstone stringers were generally less than 2 m thick with 20 - 30 % estimated porosity. The Smith Bank Formation is set at 2315 m to 2517 m. From 2517 m to 2538 m anhydrite was present. Below 2538 m massive salt is shown on the logs with occasional beds of anhydrite and claystone. Between 3205 m and 3269 low density beds indicate carnallite interbedded with the normal halite. There were no hydrocarbon indications in the well.

Conventional cores were not cut. A total of 41 sidewall cores were taken from 427 m to 3226 m. No fluid samples were taken.

The well was permanently abandoned on 30 June 1968 as dry hole.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
170.69	3267.46

Cuttings available for sampling?	NO
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**Palynological slides at the Norwegian Offshore Directorate**

Sample depth	Depth unit	Sample type	Laboratory
5500.0	[ft]	DC	RRI
5540.0	[ft]	DC	RRI
5580.0	[ft]	DC	RRI
5620.0	[ft]	DC	RRI
5660.0	[ft]	DC	RRI
5700.0	[ft]	DC	RRI
5740.0	[ft]	DC	RRI
5780.0	[ft]	DC	RRI
5820.0	[ft]	DC	RRI
5860.0	[ft]	DC	RRI
5900.0	[ft]	DC	RRI
5940.0	[ft]	DC	RRI
5980.0	[ft]	DC	RRI
6000.0	[ft]	DC	
6020.0	[ft]	DC	RRI
6060.0	[ft]	DC	RRI
6100.0	[ft]	DC	RRI
6100.0	[ft]	DC	
6140.0	[ft]	DC	RRI
6180.0	[ft]	DC	RRI
6200.0	[ft]	DC	
6230.0	[ft]	DC	RRI
6260.0	[ft]	DC	RRI
6290.0	[ft]	DC	
6305.0	[ft]	DC	RRI
6335.0	[ft]	DC	RRI
6380.0	[ft]	DC	RRI
6395.0	[ft]	DC	
6410.0	[ft]	DC	RRI
6470.0	[ft]	DC	RRI
6500.0	[ft]	DC	RRI
6500.0	[ft]	DC	
6540.0	[ft]	DC	RRI
6590.0	[ft]	DC	RRI
6600.0	[ft]	DC	
6620.0	[ft]	DC	RRI
6660.0	[ft]	DC	RRI



6690.0 [ft]	DC	
6700.0 [ft]	DC	RRI
6740.0 [ft]	DC	RRI
6780.0 [ft]	DC	RRI
6800.0 [ft]	DC	
6820.0 [ft]	DC	RRI
6840.0 [ft]	DC	RRI
6880.0 [ft]	DC	RRI
6900.0 [ft]	DC	
6920.0 [ft]	DC	RRI
6960.0 [ft]	DC	RRI
7000.0 [ft]	DC	RRI
7000.0 [ft]	DC	
7040.0 [ft]	DC	RRI
7080.0 [ft]	DC	RRI
7100.0 [ft]	DC	
7120.0 [ft]	DC	RRI
7140.0 [ft]	DC	RRI
7180.0 [ft]	DC	RRI
7200.0 [ft]	DC	
7220.0 [ft]	DC	RRI
7260.0 [ft]	DC	RRI
7300.0 [ft]	DC	
7400.0 [ft]	DC	
7500.0 [ft]	DC	
7600.0 [ft]	DC	
7700.0 [ft]	DC	

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
102	NORDLAND GP
600	HORDALAND GP
967	ROGALAND GP
967	BALDER FM
990	SELE FM
1005	LISTA FM
1020	SHETLAND GP
1020	EKOFISK FM



1040	TOR FM
1361	HOD FM
1447	CROMER KNOLL GP
1447	RAN SANDSTONE UNITS
1510	RØDBY FM
1587	SOLA FM
1665	TUXEN FM
1724	ÅSGARD FM
2083	BOKNEFJORD GP
2083	FLEKKEFJORD FM
2101	SAUDA FM
2180	TAU FM
2195	EGERSUND FM
2211	NO GROUP DEFINED
2211	SKAGERRAK FM
2315	SMITH BANK FM
2517	ZECHSTEIN GP

Composite logs

Document name	Document format	Document size [MB]
906	pdf	0.49

Geochemical information

Document name	Document format	Document size [MB]
906_1	pdf	1.28

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

Document name	Document format	Document size [MB]
906_01_WDSS_General_Information	pdf	0.21



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

Document name	Document format	Document size [MB]
906_01_Exploration_well_resume	pdf	8.44
906_02_Composite_well_log	pdf	1.50

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CAL	165	415
CBL	1068	1158
CDM	1155	3244
FDC	415	3244
IES	166	2196
LL	415	3246
MLL-C	415	3244
SGR	165	2194
SGR-C	2165	3244
SNP	415	3244
SRS	121	3244
TS	0	442

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	170.0	0.00	LOT
SURF.COND.	20	413.0	26	419.0	0.00	LOT
INTERM.	13 3/8	1170.0	17 1/2	1177.0	0.00	LOT
OPEN HOLE		3270.0	12 1/4	3270.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
152	1.01			seawater	
419	1.04	90.0		waterbased	
1173	1.17	36.0		waterbased	





2195	1.24	42.0		waterbased	
2540	1.24	58.0		waterbased	
2681	1.34	65.0		waterbased	
3269	1.37	53.0		waterbased	