General information

Wellbore name	10/8-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	10/8-1
Seismic location	line 70/57 25 & SP 7014
Production licence	009
Drilling operator	Elf Petroleum Norge AS
Drill permit	38-L
Drilling facility	PENTAGONE 81
Drilling days	37
Entered date	12.12.1970
Completed date	17.01.1971
Release date	17.01.1973
Publication date	22.04.2005
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	24.0
Water depth [m]	81.0
Total depth (MD) [m RKB]	2861.0
Bottom hole temperature [°C]	57
Oldest penetrated age	LATE PERMIAN
Oldest penetrated formation	ZECHSTEIN GP
Geodetic datum	ED50
NS degrees	57° 25' 0.01'' N
EW degrees	5° 34' 21.71'' E
NS UTM [m]	6366836.52
EW UTM [m]	654520.93
UTM zone	31
NPDID wellbore	175

Wellbore history

General

The 10/8-1 well is situated close to the Lista Nose in the eastern part of the Norwegian-Danish Basin. It was drilled on a salt induced anticlinal structure related to a salt pillow. The structure is well defined from the Permian salt up to the upper cretaceous chalk. It has a vertical closure of 300 m for a closed area of 80 km2 at a seismic horizon assumed to be the Jurassic sandstone. A fault cuts the unconformably underlying horizons attributed to Triassic. The specific objective of the 10/8-1 well was to test the hydrocarbon potential of the Jurassic sandstone section, estimated to be 60 m thick, with additional reservoir being furnished by the Triassic sandstones immediately below.

The well is Type Well for the Skagerrak Formation and Reference Well for the Smith Bank Formation

Operations and results

Wildcat well 10/8-1 was spudded with the semi-submersible installation Pentagone 81 and drilled to TD at 2861 m in the Late Permian Zechstein salt deposits. The well was completed in 37 days without reported problems. The well was drilled with seawater with returns on the sea floor down to 510 m, and with a LFC/sea water mud system from 510 m to TD.

One thousand three hundred meter of continental deposits of Triassic age is present. On top of this is the Gassum Formation. The Early to Middle Jurassic was not encountered in the well. One hundred and fifty meter Late Jurassic sand and shale is directly overlying the Gassum Formation. Around 200 m of shale was deposited during the Early Cretaceous while the Late Cretaceous is represented by 425 m of lime mudstones. The lower 200 m of the Tertiary was developed in mostly sandy facies. All Formations penetrated by the well were found water wet. The only show recorded was traces of gas (C1 and C2) from 1010 m to 1050 m. Organic geochemical screening analyses show TOC in range 0.1 - 1.5 % with the highest values in the Late Jurassic and Cretaceous sequences. The Triassic sequence appears very lean with less than 1% TOC. The upper 500 m of the well were not sampled. No conventional cores were cut and no fluid samples were taken.

The well was permanently abandoned on 17 January 1971 as a dry hole.

Testing

No drill stem test was performed.

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
520.0	[m]	DC	OD
520.0	[m]	DC	
530.0	[m]	DC	OD
540.0	[m]	DC	OD
550.0	[m]	DC	OD
550.0	[m]	DC	
560.0	[m]	DC	OD
570.0	[m]	DC	OD
580.0	[m]	DC	OD

580.0	[m]	DC	
590.0	[m]	DC	OD
600.0	[m]	DC	OD
610.0	[m]	DC	OD
610.0	[m]	DC	
620.0	[m]	DC	OD
630.0	[m]	DC	OD
640.0	[m]	DC	OD
640.0	[m]	DC	
650.0	[m]	DC	OD
660.0	[m]	DC	OD
660.0	[m]	DC	
670.0	[m]	DC	OD
680.0	[m]	DC	OD
680.0	[m]	DC	
690.0	[m]	DC	OD
700.0	[m]	DC	OD
700.0	[m]	DC	
710.0	[m]	DC	OD
720.0	[m]	DC	OD
720.0	[m]	DC	
730.0	[m]	DC	OD
735.0	[m]	DC	
740.0	[m]	DC	OD
750.0	[m]	DC	OD
750.0	[m]	DC	
760.0	[m]	DC	OD
770.0	[m]	DC	OD
770.0	[m]	DC	
780.0	[m]	DC	OD
780.0	[m]	DC	OD
785.0	[m]	DC	
790.0	[m]	DC	OD
795.0	[m]	DC	
801.0	[m]	DC	OD
810.0	[m]	DC	
830.0	[m]	DC	
845.0	[m]	DC	
855.0	[m]	DC	
865.0	[m]	DC	

880.0	[m]	DC	
900.0	[m]	DC	
1170.0	[m]	DC	
1200.0	[m]	DC	
1230.0	[m]	DC	
1260.0	[m]	DC	
1290.0	[m]	DC	
1320.0	[m]	DC	
1340.0	[m]	DC	
1370.0	[m]	DC	
1400.0	[m]	DC	
1430.0	[m]	DC	
1460.0	[m]	DC	
1490.0	[m]	DC	
1505.0	[m]	DC	

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
105	NORDLAND GP
220	HORDALAND GP
516	ROGALAND GP
516	BALDER FM
527	SELE FM
542	FISKEBANK FM
569	LISTA FM
621	VÅLE FM
656	SHETLAND GP
656	EKOFISK FM
748	TOR FM
1021	HOD FM
1153	BLODØKS FM
1157	HIDRA FM
1183	CROMER KNOLL GP
1183	RØDBY FM
1201	SOLA FM
1326	ÅSGARD FM
1367	BOKNFJORD GP
1367	FLEKKEFJORD FM

1393	SAUDA FM
1451	TAU FM
1464	EGERSUND FM
1494	NO GROUP DEFINED
1494	GASSUM FM
1567	NO GROUP DEFINED
1567	SKAGERRAK FM
2749	SMITH BANK FM
2825	ZECHSTEIN GP

Composite logs

Document name	Document format	Document size [MB]
175	pdf	0.33

Geochemical information

Document name	Document format	Document size [MB]
175_1	pdf	0.77
175_2	pdf	4.82

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

Document name	Document format	Document size [MB]
175_01_WDSS_General_Information	pdf	0.16

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

Document name	Document format	Document size [MB]
175_01_Final_Geological_report	pdf	0.50
175_02_Composite_log	pdf	1.55
175_03_Stratigraphical_and_reservoir_conclusions	pdf	0.21
175_04_Sidewall_core_description	pdf	0.43

175_05_Etude_stratigraphique	pdf	2.77
175_06_Etude_stratigraphique_geochemique_et_sedimentologiqu	pdf	6.31
175_07_Etude_micropalaeontologique_(foraminiferes)	pdf	1.55
175_08_Etude_geochemique_complementaires_de_la_matiere_orga	pdf	1.90
175_09_Considerations_sedimentologiques_a_propos_de_letude	pdf	0.44

Documents - Norwegian Offshore Directorate papers

Document name	Document format	Document size [MB]
175_01_NPD_Paper_No.26_Lithology__Well_10_8_1	pdf	10.25
175_02_NPD_Paper_No.26_Interpreted_Lithology_log__Well_10_8_1	pdf	42.90

Logs

Log type	Log top depth [m]	Log bottom depth [m]
BHC	184	497
CDM AP	1223	1842
FDC CNL	1223	1838
ISF SONIC	125	1844
SRS	125	1844

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	142.0	36	144.0	0.00	LOT
SURF.COND.	13 3/8	508.0	17 1/2	510.0	0.00	LOT
INTERM.	9 5/8	1504.0	12 1/4	1509.0	0.00	LOT
OPEN HOLE		2861.0	8 1/2	2861.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
142	1.07			seawater	
510	1.20	45.0	6.0	seawater	
1509	1.36	55.0	13.0	seawater	
2198	1.37	60.0	13.0	seawater	
2752	1.30	57.0	12.0	seawater	
2861	1.31	75.0	26.0	seawater	