General information

Wellbore name	3/7-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	3/7-3
Seismic location	LINE ANO 7380 SP: 269.
Production licence	023
Drilling operator	Elf Norge A/S
Drill permit	293-L
Drilling facility	DYVI ALPHA
Drilling days	72
Entered date	21.06.1981
Completed date	31.08.1981
Release date	31.08.1983
Publication date	09.03.2009
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	67.0
Total depth (MD) [m RKB]	3540.0
Maximum inclination [°]	3.5
Bottom hole temperature [°C]	93
Oldest penetrated age	LATE PERMIAN
Oldest penetrated formation	ZECHSTEIN GP
Geodetic datum	ED50
NS degrees	56° 24' 54.77'' N
EW degrees	4° 10' 54.33'' E
NS UTM [m]	6253058.67
EW UTM [m]	572913.12
UTM zone	31
NPDID wellbore	293

Wellbore history

General

Well 3/7-3 was drilled on a salt diapir in the southern part of the Søgne Basin in the North Sea. The primary target of the well was Danian/Late Cretaceous chalk, which had been found hydrocarbon bearing in the Ekofisk area and in the Danish well Lulu 1. Secondary target was Middle Jurassic sandstones, which had been found hydrocarbon bearing in well 2/6-2. The TD was planned below the top of the Zechstein salt in order to test possible Early Jurassic and/or Triassic sandstones.

Operations and results

Wildcat well 3/7-3 was spudded with the semi-submersible installation Dyvi Alpha on 21 June 1981and drilled to TD at 3540 m in the Late Permian Zechstein salt. At 1968 m, in the Late Eocene, a drilling break was experienced and the well started to flow. The flow was killed with a mud weight of 1.55 g/cc. After setting the 13 3/8" casing shoe at 1961 m, the well was controlled after gains and losses with a mud weight of 1.58 g/cc. No other problems were encountered while drilling. The well was drilled with seawater and bentonite down 666 m, with seawater/SST 202/FCL mud from 666 m to 1970 m, and with seawater/FCL/LC mud from 1970 m to TD.

Tertiary sands with a thickness of 37.5 m were encountered in the Paleocene. They were water bearing. The chalk, which was the main target, was relatively tight and water bearing. At 3325 m a 107 meter thick water bearing sandstone of Latest Jurassic - Earliest Cretaceous age (Kimmeridgian - Berriasian) was encountered. Below this sandstone Kimmeridgian shales rested directly on the Zechstein anhydrite. No shows were noted in the well.

Three cores were cut; one from 2830 to 2848 m in the Danian chalk (60% recovery) and two in the Beriasian Sandstones from 3337.5 to 3339 m (67% recovery) and from 3339 to 3348 m (100% recovery). No wire line fluid samples were taken.

The well was permanently abandoned on 31 August 1981as a dry well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
180.00	3522.00

Cuttings available for sampling?	YES

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2830.0	2839.6	[m]
2	3337.5	3338.5	[m]
3	3339.0	3348.0	[m]

Total core sample length [m]	19.6
Cores available for sampling?	YES

Core photos


2830-2835m


2835-2839m


3337-3338m


3339-3344m


3344-3348m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1500.0	[m]	DC	RRI
1500.0	[m]	DC	AMOCO
1530.0	[m]	DC	RRI
1530.0	[m]	DC	AMOCO
1560.0	[m]	DC	RRI
1560.0	[m]	DC	AMOCO
1590.0	[m]	DC	RRI
1590.0	[m]	DC	AMOCO
1620.0	[m]	DC	RRI
1620.0	[m]	DC	AMOCO
1650.0	[m]	DC	RRI
1650.0	[m]	DC	AMOCO
1670.0	[m]	DC	RRI
1670.0	[m]	DC	AMOCO
1710.0	[m]	DC	RRI
1710.0	[m]	DC	AMOCO
1740.0	[m]	DC	RRI
1740.0	[m]	DC	AMOCO
1770.0	[m]	DC	RRI
1770.0	[m]	DC	AMOCO
1800.0	[m]	DC	RRI
1800.0	[m]	DC	AMOCO
1820.0	[m]	DC	RRI

1820.0	[m]	DC	AMOCO
1860.0	[m]	DC	RRI
1860.0	[m]	DC	AMOCO
1890.0	[m]	DC	RRI
1890.0	[m]	DC	AMOCO
1920.0	[m]	DC	RRI
1920.0	[m]	DC	AMOCO
1950.0	[m]	DC	RRI
1950.0	[m]	DC	AMOCO
1980.0	[m]	DC	RRI
1980.0	[m]	DC	AMOCO
2010.0	[m]	DC	RRI
2010.0	[m]	DC	AMOCO
2040.0	[m]	DC	RRI
2040.0	[m]	DC	AMOCO
2070.0	[m]	DC	RRI
2070.0	[m]	DC	AMOCO
2100.0	[m]	DC	RRI
2100.0	[m]	DC	AMOCO
2140.0	[m]	DC	RRI
2140.0	[m]	DC	AMOCO
2160.0	[m]	DC	RRI
2160.0	[m]	DC	AMOCO
2190.0	[m]	DC	RRI
2190.0	[m]	DC	AMOCO
2220.0	[m]	DC	RRI
2220.0	[m]	DC	AMOCO
2240.0	[m]	DC	RRI
2240.0	[m]	DC	AMOCO
2280.0	[m]	DC	RRI
2280.0	[m]	DC	AMOCO
2310.0	[m]	DC	RRI
2310.0	[m]	DC	AMOCO
2340.0	[m]	DC	RRI
2340.0	[m]	DC	AMOCO
2370.0	[m]	DC	RRI
2370.0	[m]	DC	AMOCO
2400.0	[m]	DC	RRI
2400.0	[m]	DC	AMOCO
2430.0	[m]	DC	RRI

2430.0	[m]	DC	AMOCO
2460.0	[m]	DC	RRI
2460.0	[m]	DC	AMOCO
2490.0	[m]	DC	RRI
2490.0	[m]	DC	AMOCO
2520.0	[m]	DC	RRI
2520.0	[m]	DC	AMOCO
2550.0	[m]	DC	RRI
2550.0	[m]	DC	AMOCO
2580.0	[m]	DC	RRI
2580.0	[m]	DC	AMOCO
2610.0	[m]	DC	RRI
2610.0	[m]	DC	AMOCO
2640.0	[m]	DC	RRI
2640.0	[m]	DC	AMOCO
2670.0	[m]	DC	RRI
2670.0	[m]	DC	AMOCO
2690.0	[m]	DC	RRI
2690.0	[m]	DC	AMOCO
2700.0	[m]	DC	RRI
2710.0	[m]	DC	RRI
2710.0	[m]	DC	AMOCO
2720.0	[m]	DC	RRI
2730.0	[m]	DC	RRI
2730.0	[m]	DC	AMOCO
2740.0	[m]	DC	RRI
2740.0	[m]	DC	AMOCO
2745.0	[m]	DC	AMOCO
2750.0	[m]	DC	RRI
2750.0	[m]	DC	AMOCO
2752.0	[m]	DC	RRI
2754.0	[m]	DC	AMOCO
2760.0	[m]	DC	RRI
2760.0	[m]	DC	AMOCO
2766.0	[m]	DC	RRI
2768.0	[m]	DC	AMOCO
2770.0	[m]	DC	RRI
2776.0	[m]	DC	RRI
2776.0	[m]	DC	AMOCO
2780.0	[m]	DC	RRI

2784.0	[m]	DC	RRI
2784.0	[m]	DC	AMOCO
2792.0	[m]	DC	RRI
2792.0	[m]	DC	AMOCO
2796.0	[m]	DC	RRI
2800.0	[m]	DC	RRI
2800.0	[m]	DC	AMOCO
2808.0	[m]	DC	RRI
2808.0	[m]	DC	AMOCO
2810.0	[m]	DC	RRI
2816.0	[m]	DC	RRI
2816.0	[m]	DC	AMOCO
2820.0	[m]	DC	RRI
2820.0	[m]	DC	AMOCO
2824.0	[m]	DC	RRI
2824.0	[m]	DC	AMOCO
2830.0	[m]	DC	RRI
2830.0	[m]	DC	AMOCO
2850.0	[m]	DC	RRI
2850.0	[m]	DC	AMOCO

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
92	NORDLAND GP
1455	HORDALAND GP
2697	ROGALAND GP
2697	BALDER FM
2726	SELE FM
2761	LISTA FM
2775	MAUREEN FM
2812	SHETLAND GP
2812	EKOFISK FM
2907	TOR FM
3119	HOD FM
3280	CROMER KNOLL GP
3280	ÅSGARD FM
3325	RAN SANDSTONE UNITS
3432	TYNE GP

3432	MANDAL FM
3506	ZECHSTEIN GP

Geochemical information

Document name	Document format	Document size [MB]
293_1	pdf	0.24
293_2	pdf	9.17

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

Document name	Document format	Document size [MB]
293_01_WDSS_General_Information	pdf	0.10
293_02_WDSS_completion_log	pdf	0.23

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

Document name	Document format	Document size [MB]
293_01_3_7_3_GEOLOGICAL_COMPLETION_REPORT	PDF	25.90
293_02_3_7_3_Completion_log	pdf	1.91
293_03_3_7_3_Completion_Report	pdf	25.90
293_03_3_7_3_CORE_DESCRIPTION	PDF	0.01
293_03_3_7_3_CORE_PHOTOS_1-3	PDF	0.69
293_03_3_7_3_DRILLING_PROGRAM	pdf	3.22
293_03_3_7_3_DRILLING_REPORT	pdf	4.28
293_03_3_7_3_LITHOSTRATIGRAPHY_AND_RESERVOIR_ASPECT_OF_THE_PRE-CHALK_SEDIMENTS	pdf	0.48
293_03_3_7_3_PRELIMINARY_REPORT_CORE_1	PDF	0.09

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL	500	1935
CBL VDL	1700	3242

HDT	1971	3253
HDT	3240	3505
ISF SONIC GR	153	2906
ISF SONIC NGT	3244	3542
LDL CNL GR	1961	3542
LDL GR	153	666
TEMP	100	1500
TEMP	378	1800
VELOCITY	2500	3520

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	153.0	36	153.5	0.00	LOT
SURF.COND.	20	653.0	26	666.0	1.65	LOT
INTERM.	13 3/8	1961.0	17 1/2	1970.0	1.81	LOT
INTERM.	9 5/8	3241.0	12 1/4	3253.0	2.04	LOT
OPEN HOLE		3540.0	8 1/2	3542.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
742	1.13			waterbased	
1027	1.19			waterbased	
2019	1.59			waterbased	
2814	1.63			waterbased	
3241	1.63			waterbased	
3540	1.64			waterbased	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
3338.00	[m]
3344.00	[m]
3346.00	[m]

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]
293_Formation_pressure_(Formasjonstrykk)	pdf	0.21