General information

Wellbore name	7/8-4
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	7/8-4
Seismic location	NHCN 82-119-SP. 386+NHCN 82-309-SP. 1095
Production licence	069
Drilling operator	Conoco Norway Inc.
Drill permit	446-L
Drilling facility	NORTRYM
Drilling days	72
Entered date	11.12.1984
Completed date	20.02.1985
Release date	20.02.1987
Publication date	19.10.2006
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	82.0
Total depth (MD) [m RKB]	4400.0
Final vertical depth (TVD) [m RKB]	4398.0
Maximum inclination [°]	3.2
Bottom hole temperature [°C]	160
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	SMITH BANK FM
Geodetic datum	ED50
NS degrees	57° 15' 28.03'' N
EW degrees	2° 25' 46.23'' E
NS UTM [m]	6346368.89
EW UTM [m]	465582.36
UTM zone	31
NPDID wellbore	448

Wellbore history

General

Wildcat well 7/8-4 was drilled on the northern flank of the Central Graben. The prospect was a structural/stratigraphic trap situated on the north flank of a high standing Triassic fault block. The objective was to test the hydrocarbon potential of a prognosed Late Jurassic sand body at 3840 m. Isolated sands within the Triassic were also postulated as hydrocarbon traps and potential secondary targets.

Operations and results

Well 7/8-4 was spudded with the semi-submersible installation Nortrym on 11 December 1984 and drilled to TD at 4400 m in Early Triassic sandstones and shales of the Smith Bank Formation. The overall operation took 72 days from spud. Problems with gumbo and keeping the hole clean were experienced. A weighted KCl polymer mud was used to keep the hole open and prevent shale spalling. From 4192 m onwards, problems of tight hole was experienced with the drill string becoming permanently stuck at 4400 m. Differential sticking was thought to be the problems, so the mud weight was reduced to compensate for this. While attempting to free the pipe the well started to flow but this was quickly stopped by raising the mud weight. While pulling out of the hole the drill pipe got stuck with the bit at 4382 m. The pipe was unscrewed at 4250 m and during fishing operations two more sections of pipe were lost in the hole, one with the top at 4192 m, the other at 4183 m. The operator then decided on a sidetrack, and the hole was cemented back to 4130 m and a sidetrack was kicked off from 4140 m. Eleven days were lost due to the plug back and sidetrack operation. The well was drilled with seawater down to 619 m and with KCl polymer mud from 619 m to TD.

Two cores were cut from 3825.5 m to 3859 m in what was believed to be the Ula sandstone of the Late Jurassic, the primary objective. Subsequent analysis revealed the Lower Cretaceous to unconformably overlie Middle Triassic formations with no Jurassic rocks present at this location. Hence, the cored section was in the upper Smith Bank Formation. No hydrocarbon indications were registered in the well. No pressure or fluid samples were taken on wire line.

The well was permanently abandoned on 20 February 1985 as 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]
200.00	4397.00

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	3825.0	3831.3	[m]
2	3831.5	3859.0	[m]

Total core sample length [m]	33.8
Cores available for sampling?	YES

Core photos


3823-3831m

3823-3831m

3823-3831m

3823-3831m

3823-3831m

3823-3831m

3823-3831m

3823-3831m

3823-3831m

3823-3831m

3831-3839m

3831-3839m

3831-3839m

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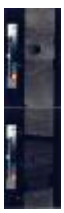
3831-3839m

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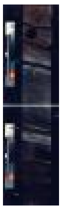
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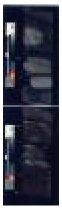
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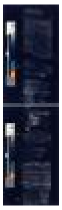
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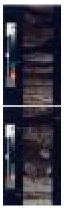
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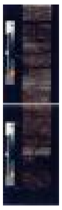
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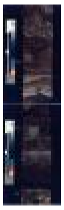
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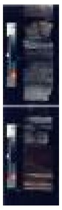
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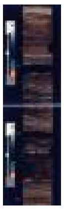
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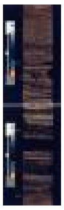
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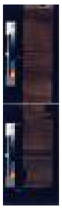
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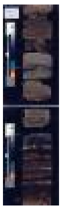
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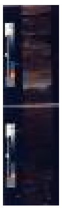
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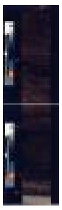
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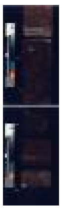
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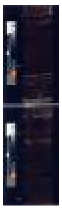
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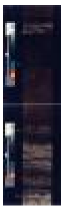
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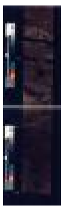
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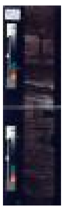
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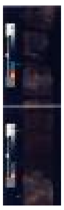
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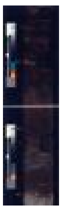
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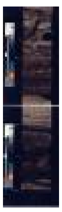
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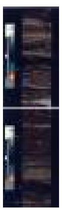
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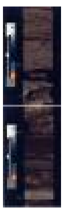
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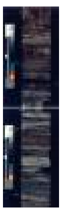
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Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
3701.0	[m]	DC	OD
3710.0	[m]	DC	OD
3719.0	[m]	DC	OD
3728.0	[m]	DC	OD
3740.0	[m]	DC	OD
3749.0	[m]	DC	OD
3758.0	[m]	DC	OD
3770.0	[m]	DC	OD
3806.0	[m]	DC	OD
3809.0	[m]	DC	OD
3812.0	[m]	DC	OD
3815.0	[m]	DC	OD
3818.0	[m]	DC	OD
3821.0	[m]	DC	OD
3827.0	[m]	C	OD
3828.1	[m]	C	OD
3829.5	[m]	C	OD
3830.1	[m]	C	OD
3832.4	[m]	C	OD
3854.9	[m]	C	OD

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
107	NORDLAND GP
1450	HORDALAND GP
2955	ROGALAND GP
2955	BALDER FM
2989	SELE FM
3040	LISTA FM
3099	MAUREEN FM
3125	SHETLAND GP
3125	EKOFISK FM
3187	TOR FM
3529	HOD FM
3629	BLODØKS FM
3705	HIDRA FM
3728	CROMER KNOLL GP
3728	RØDBY FM
3817	TYNE GP
3817	MANDAL FM
3826	HEGRE GP
3826	SMITH BANK FM

Composite logs

Document name	Document format	Document size [MB]
448_7_8_4	pdf	0.98

Geochemical information

Document name	Document format	Document size [MB]
448_1	pdf	1.88

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

Document name	Document format	Document size [MB]
448_01_WDSS_General_Information	pdf	0.29
448_02_WDSS_completion_log	pdf	0.32

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

Document name	Document format	Document size [MB]
448_01_7_8_4_Completion_report	pdf	7.74

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CST	3799	4014
ISF LSS GR MSFL SP	203	613
ISF LSS GR MSFL SP LDT CNL GR	606	1957
ISF LSS MSFL GR CAL LDT CNL GR C	1946	3813
ISF LSS MSFL LDT CNL SHDT GR	3795	4405
MWD GR RES DIR	649	4397
TEMPERATURE	107	3694
TEMPERATURE	107	1917
VSP	250	4400

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	204.0	36	205.0	0.00	LOT
SURF.COND.	20	607.0	26	619.0	1.67	LOT
INTERM.	13 3/8	1946.0	17 1/2	1970.0	1.93	LOT
INTERM.	9 5/8	3796.0	12 1/4	3808.0	2.23	LOT
OPEN HOLE		4400.0	8 1/2	4400.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
175	1.07			WATER BASED	11.12.1984
205	1.07			WATER BASED	12.12.1984
619	1.13			WATER BASED	17.12.1984
619	0.00	17.0	105.3	WATER BASED	15.12.1984
619	1.09	17.0	105.3	WATER BASED	16.12.1984
830	1.19	20.0	114.7	WATER BASED	19.12.1984
830	1.19	20.0	114.7	WATER BASED	18.12.1984
1241	1.39	25.0	114.7	WATER BASED	20.12.1984
1534	1.50	27.0	100.5	WATER BASED	20.12.1984
1694	1.50	30.0	95.8	WATER BASED	26.12.1984
1915	1.50	32.0	301.6	WATER BASED	26.12.1984
1963	1.57	23.0	110.1	WATER BASED	27.12.1984
1963	1.61	27.0	95.8	WATER BASED	27.12.1984
1963	1.61	27.0	95.8	WATER BASED	27.12.1984
1970	1.60	23.0	95.8	WATER BASED	14.12.1984
2119	1.54	28.0	81.4	WATER BASED	14.12.1984
2194	1.48	30.0	86.2	WATER BASED	14.12.1984
2293	1.48	30.0	95.8	WATER BASED	14.12.1984
2354	1.48	34.0	105.3	WATER BASED	14.12.1984
2592	1.48	29.0	91.0	WATER BASED	15.12.1984
2642	1.48	33.0	105.3	WATER BASED	30.12.1984
2919	1.48	24.0	95.8	WATER BASED	25.12.1984
2994	1.48	22.0	110.1	WATER BASED	25.12.1984
3105	1.48	21.0	100.5	WATER BASED	25.12.1984
3128	1.47	26.0	134.1	WATER BASED	02.01.1985
3196	1.48	26.0	110.1	WATER BASED	04.01.1985
3254	1.48	24.0	129.2	WATER BASED	07.01.1985
3342	1.48	25.0	110.1	WATER BASED	14.01.1985
3424	1.48	22.0	119.7	WATER BASED	14.01.1985
3438	1.48	23.0	100.0	WATER BASED	14.01.1985
3453	1.48	22.0	129.3	WATER BASED	14.01.1985
3559	1.48	25.0	119.7	WATER BASED	15.01.1985
3571	1.44	27.0	110.1	WATER BASED	16.01.1985
3617	1.54	27.0	119.7	WATER BASED	17.01.1985
3660	1.54	27.0	119.7	WATER BASED	17.01.1985
3684	1.54	25.0	124.5	WATER BASED	21.01.1985
3783	1.71	53.0	81.0	WATER BASED	16.02.1985

3808	1.54	36.0	134.0	WATER BASED	24.01.1985
3826	1.74	38.0	143.6	WATER BASED	28.01.1985
3857	1.74	33.0	114.9	WATER BASED	28.01.1985
3859	1.74	34.0	124.5	WATER BASED	27.01.1985
3911	1.74	26.0	148.4	WATER BASED	29.01.1985
3943	1.74	38.0	114.9	WATER BASED	30.01.1985
4092	1.74	360.0	110.1	WATER BASED	31.01.1985
4092	1.74	36.0	110.1	WATER BASED	31.01.1985
4092	1.74	360.0	110.1	WATER BASED	31.01.1985
4130	1.72	33.0	72.0	WATER BASED	10.02.1985
4140	1.71	32.0	71.8	WATER BASED	11.02.1985
4192	1.74	31.0	100.5	WATER BASED	31.01.1985
4192	1.69	30.0	110.1	WATER BASED	31.01.1985
4192	1.74	31.0	100.5	WATER BASED	31.01.1985
4192	1.69	30.0	110.1	WATER BASED	31.01.1985
4347	1.68	31.0	81.4	WATER BASED	31.01.1985
4400	1.67	28.0	67.0	WATER BASED	02.02.1985
4400	1.69	28.0	57.4	WATER BASED	06.02.1985
4400	1.71	31.0	62.0	WATER BASED	07.02.1985
4400	1.69	28.0	57.4	WATER BASED	06.02.1985
4400	1.66	28.0	48.0	WATER BASED	05.02.1985
4400	1.71	31.0	62.0	WATER BASED	07.02.1985
4400	1.71	38.0	86.2	WATER BASED	16.02.1985
4400	1.66	28.0	48.0	WATER BASED	05.02.1985