



General information

Wellbore name	34/2-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	34/2-3
Seismic location	ANO 79 - 35 SP: 620.
Production licence	056
Drilling operator	Amoco Norway Oil Company
Drill permit	286-L
Drilling facility	SEDCO 703
Drilling days	91
Entered date	15.05.1981
Completed date	13.08.1981
Release date	13.08.1983
Publication date	18.05.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	26.0
Water depth [m]	388.0
Total depth (MD) [m RKB]	3742.0
Final vertical depth (TVD) [m RKB]	3740.0
Maximum inclination [°]	5.2
Bottom hole temperature [°C]	117
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	LUNDE FM
Geodetic datum	ED50
NS degrees	61° 47' 20.91" N
EW degrees	2° 30' 4.6" E
NS UTM [m]	6850955.73
EW UTM [m]	473696.79
UTM zone	31
NPID wellbore	421



Wellbore history



General

Block 34/2 lies at the very northern end of the Tampen Spur and is located at the convergence of pre-Cretaceous Highs trending through Block 34/4 from Brent/Statfjord, from Dunlin/Murchison, from the 34/10 area and from a similar high trend through Block 34/5 from Block 34/8. The block was awarded in License 56 in 1979. The first well in the license (34/2-1) was spudded on 29 December 1979 and junked and abandoned on 19 February 1980 at 850 m, due to technical problems. As the first well did not satisfy license commitments, it was agreed among the partners that Well 34/2-2 would be drilled at the same location with the same objectives. This well was drilled to 4074 m and plugged and abandoned after having found poor reservoir conditions and no hydrocarbon accumulations. Well 34/2-3 was drilled 3.25 km to the northwest of Well 34/2-2 on the northern end of the Tampen Spur. The main objective was to test the sedimentary section below the Base Cretaceous Unconformity in a seismically defined northeasterly trending horst block.

Operations and results

The well was spudded with the semi-submersible installation SEDCO 703 on 15 May 1981. Due to boulder beds at the location the first 36-inch interval was unsuccessful. The well was respudded on 17 May 1981 and drilled to TD at 3742 m in the Late Triassic Lunde Formation. The well was drilled with spud mud down to 815 m, with gypsum/lignosulphonate from 815 m to 3340 m, and with gel/chemtrol/lignosulphonate from 3340 m to TD.

While drilling between 820 m and 890 m shallow gas was encountered, giving readings of up to 7% total gas. However, this caused no drilling problems.

The well penetrated Tertiary and Cretaceous sediments down to the Barremian Rødby Formation, which was found unconformably overlying Late Triassic Lunde Formation. No significant reservoir zones were encountered above Top Trias. The Lunde Formation consisted of interbedded shales, siltstones, sandstones, and some thin conglomerate beds with the best reservoir properties in the upper section from 3351 m to 3396 m. Apart from the shallow gas there were no significant gas shows until 2335 m to 2440 m where background total gas readings of 1.8% were noted, CI through to C3 being present. A maximum of 3.4% total gas was recorded at 2370 m. Trace to minor oil shows were recorded sporadically in limestone stringers and sandstones from 2190 m down to 3300 m. From 3300 m to 3370 m oil shows were noted in sandstone, siltstone and limestone throughout the section. At 3360 m, following a drilling break, a small flow into the well was detected. A soft shut in was initiated utilizing the annular bop. Shut in drill pipe and casing pressures indicated a formation pore pressure of 14.6 ppg EMW. The well kick was killed with 15.0 ppg mud. The bottoms-up sample was collected which appeared to contain traces of hydrocarbons. Following the drill break at 3360 m three consecutive cores were cut in the Triassic Hegre Group from 3360.5 m to 3405 m. The core barrel from the first core also contained some oil. Good oil shows were recorded in the most permeable sandstones throughout the cored section and oil bleeding was observed from sandstone and fractures. Wire line logs were run before and after setting the 13 3/8" and 9 5/8" casing and in the 8 1/2" open hole. RFT fluid samples were taken at depths 3354.2 m, 3373 m, 3374.3 m, and 3381.5 m. No hydrocarbons were recovered in any of the samples, only mud filtrate and water.

The well was plugged and abandoned as a dry hole with shows on 13 August 1981.

Testing

No drill stem test was performed



Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
810.00	3742.50

Cuttings available for sampling?	YES
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Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	3360.5	3372.6	[m]
2	3377.6	3396.2	[m]
3	3396.5	3404.4	[m]

Total core sample length [m]	38.6
Cores available for sampling?	YES

Core photos



3360-3365m



3366-3367m



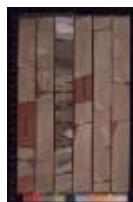
3368-3372m



3373-3377m



3378-3382m



3383-3388m



3389-3395m



3396-3399m



3400-3403m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1500.0	[m]	DC	ROBERTSO
1510.0	[m]	DC	ROBERTSO



1520.0	[m]	DC	ROBERTSO
1530.0	[m]	DC	ROBERTSO
1540.0	[m]	DC	ROBERTSO
1550.0	[m]	DC	ROBERTSO
1560.0	[m]	DC	ROBERTSO
1570.0	[m]	DC	ROBERTSO
1580.0	[m]	DC	ROBERTSO
1590.0	[m]	DC	ROBERTSO
1600.0	[m]	DC	ROBERTSO
1610.0	[m]	DC	ROBERTSO
1620.0	[m]	DC	ROBERTSO
1630.0	[m]	DC	ROBERTSO
1640.0	[m]	DC	ROBERTSO
1650.0	[m]	DC	ROBERTSO
1660.0	[m]	DC	ROBERTSO
1670.0	[m]	DC	ROBERTSO
1680.0	[m]	DC	ROBERTSO
1690.0	[m]	DC	ROBERTSO
1700.0	[m]	DC	ROBERTSO
1710.0	[m]	DC	ROBERTSO
1720.0	[m]	DC	ROBERTSO
1730.0	[m]	DC	ROBERTSO
1740.0	[m]	DC	ROBERTSO
1750.0	[m]	DC	ROBERTSO
1760.0	[m]	DC	ROBERTSO
1770.0	[m]	DC	ROBERTSO
1790.0	[m]	DC	ROBERTSO
1800.0	[m]	DC	ROBERTSO
1810.0	[m]	DC	ROBERTSO
1820.0	[m]	DC	ROBERTSO
1830.0	[m]	DC	ROBERTSO
1840.0	[m]	DC	ROBERTSO
1850.0	[m]	DC	ROBERTSO
1860.0	[m]	DC	ROBERTSO
1870.0	[m]	DC	ROBERTSO
1880.0	[m]	DC	ROBERTSO
1890.0	[m]	DC	ROBERTSO
1900.0	[m]	DC	ROBERTSO
1910.0	[m]	DC	ROBERTSO
1920.0	[m]	DC	ROBERTSO



1930.0	[m]	DC	ROBERTSO
1940.0	[m]	DC	ROBERTSO
1950.0	[m]	DC	ROBERTSO
1960.0	[m]	DC	ROBERTSO
1970.0	[m]	DC	ROBERTSO
1980.0	[m]	DC	ROBERTSO

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
414	NORDLAND GP
1418	UTSIRA FM
1451	HORDALAND GP
1872	ROGALAND GP
1872	BALDER FM
1916	LISTA FM
1982	SHETLAND GP
1982	JORSALFARE FM
2194	KYRRE FM
2825	BLODØKS FM
2834	SVARTE FM
3105	CROMER KNOLL GP
3105	RØDBY FM
3337	ÅSGARD FM
3344	HEGRE GP
3344	LUNDE FM

Composite logs

Document name	Document format	Document size [MB]
421	pdf	0.52

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

Document name	Document format	Document size [MB]
421_01_WDSS_General_Information	pdf	0.10





421_02_WDSS_completion_log	pdf	0.26
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Documents - reported by the production licence (period for duty of secrecy expired)

Document name	Document format	Document size [MB]
421_34_2_3_COMPLETION_REPORT_AND_LOG	pdf	46.19

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL CCL GR	411	2015
CBL VDL CCL GR	1600	3305
CST	0	0
CST	2532	3340
DLL MSFL SP CAL GR	3336	3575
DLL MSFL SP CAL GR	3500	3741
FDC CNL CAL GR	2030	3342
FDC CNL CAL GR	3336	3575
FDC CNL CAL GR	3500	3741
HDT	2030	3340
HDT	3336	3575
HDT	3500	3741
ISF LSS SP CAL GR	802	2036
ISF LSS SP GR	2030	3341
ISF LSS SP GR	3336	3576
ISF LSS SP GR	3336	3742
RFT GR	3354	3575
RFT GR	3373	3373
VSP	0	0

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	494.0	36	506.0	0.00	LOT
SURF.COND.	20	802.0	26	815.0	1.56	LOT
INTERM.	13 3/8	2030.0	17 1/2	2040.0	1.77	LOT





INTERM.	9 5/8	3336.0	12 1/4	3341.0	2.05	LOT
OPEN HOLE		3741.0	8 1/2	3741.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
493	0.00			spud mud	
822	0.00			spud mud	
1299	1.07	41.0		water mud	
2040	1.31	51.0		water mud	
2523	1.55	50.0		water mud	
2764	1.56	49.0		water mud	
3249	1.57	56.0		water mud	
3341	1.67	50.0		water mud	
3360	1.84	61.0		water mud	
3742	1.84	52.0		water mud	

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]
421_Formation_pressure_(Formasjonstrykk)	pdf	0.22

