

**General information**

Wellbore name	33/6-2
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	33/6-2
Seismic location	MN9601M- line 984 & trace 2954
Production licence	206
Drilling operator	Mobil Exploration Norway INC
Drill permit	864-L
Drilling facility	BYFORD DOLPHIN
Drilling days	67
Entered date	28.10.1996
Completed date	02.01.1997
Release date	02.01.1999
Publication date	24.09.2003
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	25.3
Water depth [m]	316.7
Total depth (MD) [m RKB]	3950.0
Final vertical depth (TVD) [m RKB]	3945.0
Maximum inclination [°]	5.6
Bottom hole temperature [°C]	137
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	STATFJORD GP
Geodetic datum	ED50
NS degrees	61° 32' 15.87" N
EW degrees	1° 56' 33" E
NS UTM [m]	6823304.99
EW UTM [m]	443772.57
UTM zone	31
NPDID wellbore	2873



Wellbore history

General

The 33/6-2 well is located to the north of the Statfjord Nord oil field and to Northwest of Snorre oil field. Agip's 33/6-1 well, which was plugged and abandoned dry, was drilled approximately 4 km to the west.

The primary objective of the well was the Upper Jurassic (Volgian) Intra-Draupne "Munin sandstone unit" of the Draupne Formation. It was designed to find commercial hydrocarbons in a structural/stratigraphic trap where the Base Munin sub crops the base Cretaceous unconformity. The secondary objective of the well was to test the reserve potential in the Brent Group, intra Dunlin Group and Statfjord Formation sandstones.

Operations and results

Exploration well 33/6-2 was spudded with the semi-submersible installation "Byford Dolphin" on 28 October 1996 and drilled to TD at 3950 m in the Early Jurassic Statfjord Formation. The well was drilled with seawater and hi-vis pills down to 991 m, with KCl/glycol ("ANCO 208") mud from 991 m to 2150 m, and with KCl/polymer/glycol ("ANCO 208") from 2150 m to TD. In the Upper Jurassic two cores were cut in sandstones of the Intra-Draupne sandstone unit. Whilst there were some shows, the sandstones proved to be generally low porosity. In the Early - Middle Jurassic Brent and Dunlin Group sandstones no oil shows were observed and no cores were taken. Weak shows were however observed in shaley/carbonaceous lithologies in this interval, indicating some in-situ generated hydrocarbons. No shows were observed in the Statfjord Formation. RFT fluid samples were retrieved from 3550 m in the Intra-Draupne Sandstone and from 3622 m in the Brent Group. By adding thiocyanate to the mud as a tracer it could be established that both samples were heavily contaminated by mud (70 % ? 80 %).

The well was plugged and abandoned as a dry hole with shows on 2 January 1997.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1000.00	3950.00

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	3500.0	3519.7	[m]
2	3540.0	3551.9	[m]



Total core sample length [m]	31.5
Cores available for sampling?	YES

Core photos



3500-3505m



3505-3510m



3510-3515m



3515-3519m



3540-3545m



3545-3550m



3550-3552m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1500.0	[m]	DC	RRI
1510.0	[m]	DC	RRI
1520.0	[m]	DC	RRI
1530.0	[m]	DC	RRI
1540.0	[m]	DC	RRI
1550.0	[m]	DC	RRI
1560.0	[m]	DC	RRI
1570.0	[m]	DC	RRI
1580.0	[m]	DC	RRI
1590.0	[m]	DC	RRI
1600.0	[m]	DC	RRI
1610.0	[m]	DC	RRI
1620.0	[m]	DC	RRI
1630.0	[m]	DC	RRI
1640.0	[m]	DC	RRI
1650.0	[m]	DC	RRI



1660.0 [m]	DC	RRI
1670.0 [m]	DC	RRI
1680.0 [m]	DC	RRI
1690.0 [m]	DC	RRI
1700.0 [m]	DC	RRI
1710.0 [m]	DC	RRI
1720.0 [m]	DC	RRI
1730.0 [m]	DC	RRI
1740.0 [m]	DC	RRI
1750.0 [m]	DC	RRI
1760.0 [m]	DC	RRI
1770.0 [m]	DC	RRI
1780.0 [m]	DC	RRI
1790.0 [m]	DC	RRI
1800.0 [m]	DC	RRI
1810.0 [m]	DC	RRI
1830.0 [m]	DC	RRI
1840.0 [m]	DC	RRI
1850.0 [m]	DC	RRI
1860.0 [m]	DC	RRI
1870.0 [m]	DC	RRI
1880.0 [m]	DC	RRI
1890.0 [m]	DC	RRI
1900.0 [m]	DC	RRI
1910.0 [m]	DC	RRI
1920.0 [m]	DC	RRI
1930.0 [m]	DC	RRI
1940.0 [m]	DC	RRI
1970.0 [m]	DC	RRI
2000.0 [m]	DC	RRI
2030.0 [m]	DC	RRI
2060.0 [m]	DC	RRI
2090.0 [m]	DC	RRI
2150.0 [m]	DC	RRI
2180.0 [m]	DC	RRI
2210.0 [m]	DC	RRI
2240.0 [m]	DC	RRI
2270.0 [m]	DC	RRI
2300.0 [m]	DC	RRI
2330.0 [m]	DC	RRI



2354.0 [m]	DC	RRI
2360.0 [m]	DC	RRI
2390.0 [m]	DC	RRI
2420.0 [m]	DC	RRI
2450.0 [m]	DC	RRI
2480.0 [m]	DC	RRI
2510.0 [m]	DC	RRI
2540.0 [m]	DC	RRI
2570.0 [m]	DC	RRI
2600.0 [m]	DC	RRI
2630.0 [m]	DC	RRI
2660.0 [m]	DC	RRI
2690.0 [m]	DC	RRI
2720.0 [m]	DC	RRI
2750.0 [m]	DC	RRI
2780.0 [m]	DC	RRI
2810.0 [m]	DC	RRI
2840.0 [m]	DC	RRI
2870.0 [m]	DC	RRI
2900.0 [m]	DC	RRI
2930.0 [m]	DC	RRI
2960.0 [m]	DC	RRI
2990.0 [m]	DC	RRI
3020.0 [m]	DC	RRI
3050.0 [m]	DC	RRI
3080.0 [m]	DC	RRI
3110.0 [m]	DC	RRI
3140.0 [m]	DC	RRI
3170.0 [m]	DC	RRI
3200.0 [m]	DC	RRI
3232.0 [m]	DC	RRI
3236.0 [m]	DC	RRI
3242.0 [m]	DC	RRI
3248.0 [m]	DC	RRI
3260.0 [m]	DC	RRI
3266.0 [m]	DC	RRI
3272.0 [m]	DC	RRI
3278.0 [m]	DC	RRI
3284.0 [m]	DC	RRI
3290.0 [m]	DC	RRI



3296.0 [m]	DC	RRI
3302.0 [m]	DC	RRI
3308.0 [m]	DC	RRI
3386.0 [m]	DC	RRI
3392.0 [m]	DC	RRI
3398.0 [m]	DC	RRI
3404.0 [m]	DC	RRI
3410.0 [m]	DC	RRI
3422.0 [m]	DC	RRI
3428.0 [m]	DC	RRI
3434.0 [m]	DC	RRI
3446.0 [m]	DC	RRI
3452.0 [m]	DC	RRI
3456.0 [m]	DC	RRI
3462.0 [m]	DC	RRI
3468.0 [m]	DC	RRI
3474.0 [m]	DC	RRI
3480.0 [m]	DC	RRI
3485.0 [m]	SWC	RRI
3492.0 [m]	DC	RRI
3493.0 [m]	SWC	RRI
3498.0 [m]	DC	RRI
3500.0 [m]	DC	RRI
3502.0 [m]	DC	RRI
3504.0 [m]	DC	RRI
3506.0 [m]	DC	RRI
3510.0 [m]	DC	RRI
3512.0 [m]	DC	RRI
3513.0 [m]	DC	RRI
3516.0 [m]	DC	RRI
3517.0 [m]	DC	RRI
3522.0 [m]	DC	RRI
3528.0 [m]	DC	RRI
3531.0 [m]	SWC	RRI
3535.0 [m]	SWC	RRI
3540.0 [m]	C	RRI
3543.0 [m]	DC	RRI
3544.0 [m]	DC	RRI
3546.0 [m]	DC	RRI
3547.0 [m]	DC	RRI



3549.0 [m]	DC	RRI
3550.0 [m]	C	RRI
3551.0 [m]	DC	RRI
3552.0 [m]	DC	RRI
3556.0 [m]	SWC	RRI
3559.0 [m]	SWC	RRI
3564.0 [m]	DC	RRI
3570.0 [m]	DC	RRI
3578.0 [m]	DC	RRI
3583.0 [m]	SWC	RRI
3588.0 [m]	DC	RRI
3598.0 [m]	SWC	RRI
3599.0 [m]	SWC	RRI
3606.0 [m]	DC	RRI
3612.0 [m]	DC	RRI
3617.0 [m]	DC	RRI
3619.0 [m]	SWC	RRI
3625.0 [m]	SWC	RRI
3708.0 [m]	DC	RRI
3714.0 [m]	DC	RRI
3720.0 [m]	DC	RRI
3724.0 [m]	DC	RRI
3724.0 [m]	SWC	RRI
3736.0 [m]	SWC	RRI
3738.0 [m]	DC	RRI
3744.0 [m]	DC	RRI
3750.0 [m]	DC	RRI
3756.0 [m]	DC	RRI
3762.0 [m]	DC	RRI
3762.0 [m]	SWC	RRI
3768.0 [m]	DC	RRI
3774.0 [m]	DC	RRI
3777.0 [m]	SWC	RRI
3786.0 [m]	DC	RRI
3792.0 [m]	DC	RRI
3797.0 [m]	DC	RRI
3797.0 [m]	SWC	RRI
3804.0 [m]	DC	RRI
3810.0 [m]	DC	RRI
3816.0 [m]	DC	RRI



3822.0 [m]	DC	RRI
3825.0 [m]	DC	RRI
3834.0 [m]	DC	RRI
3840.0 [m]	DC	RRI
3846.0 [m]	DC	RRI
3852.0 [m]	DC	RRI
3858.0 [m]	DC	RRI
3864.0 [m]	DC	RRI
3870.0 [m]	DC	RRI
3870.0 [m]	SWC	RRI
3872.0 [m]	SWC	RRI
3876.0 [m]	DC	RRI
3880.0 [m]	SWC	RRI
3888.0 [m]	DC	RRI
3894.0 [m]	DC	RRI
3901.0 [m]	DC	RRI
3901.0 [m]	SWC	RRI
3906.0 [m]	DC	RRI
3924.0 [m]	DC	RRI
3930.0 [m]	DC	RRI
3936.0 [m]	DC	RRI
3942.0 [m]	DC	RRI
3948.0 [m]	DC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
342	NORDLAND GP
1095	UTSIRA FM
1134	HORDALAND GP
1277	NO FORMAL NAME
1297	NO FORMAL NAME
1341	NO FORMAL NAME
1358	NO FORMAL NAME
1732	ROGALAND GP
1732	BALDER FM
1771	LISTA FM
1921	VÅLE FM
1933	SHETLAND GP



1933	JORSALFARE FM
2251	KYRRE FM
3110	TRYGGVASON FM
3455	CROMER KNOLL GP
3455	MIME FM
3466	VIKING GP
3466	DRAUPNE FM
3488	INTRA DRAUPNE FM SS
3551	DRAUPNE FM
3585	HEATHER FM
3613	BRENT GP
3613	UNDIFFERENTIATED
3725	UNDIFFERENTIATED
3764	BROOM FM
3777	DUNLIN GP
3777	DRAKE FM
3815	COOK FM
3856	BURTON FM
3872	AMUNDSEN FM
3913	STATEFJORD GP

Composite logs

Document name	Document format	Document size [MB]
2873	pdf	0.63

Geochemical information

Document name	Document format	Document size [MB]
2873_1	pdf	1.90
2873_2	pdf	1.95
2873_3	pdf	1.97
2873_4	pdf	1.65

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





Document name	Document format	Document size [MB]
2873 33 6 2 COMPLETION LOG	pdf	3.49
2873 33 6 2 COMPLETION REPORT	pdf	64.81

Logs

Log type	Log top depth [m]	Log bottom depth [m]
- GR AMS	986	2142
- GR AMS	2137	3457
CMR DSI NGT AMS	3440	3953
CST GR	2153	3445
CST GR	3481	3916
FMS AIT LDT CNL MSFL GR AMS	3440	3953
MDT GR	3493	3622
MWD LWD - D EWR GR	342	991
MWD LWD - RDG EWR GR	342	990
MWD LWD - RGD EWR GR	976	3950
PI DSI MSFL LDL CNL GPIT EDAC -	986	2142
PI DSI MSFL LDL CNL GPIT EDAC -	2137	3457
RFT GR	3493	3619
VSP - WSC	1137	2947

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	390.0	36	390.0	0.00	LOT
SURF.COND.	20	986.0	26	991.0	0.00	LOT
INTERM.	13 3/8	2138.7	17 1/2	2150.0	0.00	LOT
INTERM.	9 5/8	3440.0	12 1/4	3453.0	0.00	LOT
OPEN HOLE		3950.0	8 1/2	3950.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
585	1.03	30.0		SEAWATER	
990	1.02	30.0		SEAWATER	





991	1.12	25.0		SEAWATER	
1168	1.33	25.0		SEAWATER	
1468	1.37	33.0		SEAWATER	
1812	1.37	27.0		SEAWATER	
2020	1.42	28.0		SEAWATER	
2150	1.50	33.0		SEAWATER	
2296	1.50	23.0		SEAWATER	
2390	1.51	26.0		SEAWATER	
2406	1.51	26.0		SEAWATER	
2523	1.50	19.0		SEAWATER	
2679	1.50	24.0		SEAWATER	
2716	1.49	23.0		SEAWATER	
2788	1.48	25.0		SEAWATER	
2891	1.49	25.0		SEAWATER	
2956	1.49	29.0		SEAWATER	
3181	1.50	21.0		SEAWATER	
3453	1.50	21.0		SEAWATER	
3453	1.50	28.0		SEAWATER	
3453	1.50	26.0		SEAWATER	
3453	1.51	22.0		SEAWATER	
3453	1.50	21.0		SEAWATER	
3455	0.00			SEAWATER	
3494	1.50	22.0		SEAWATER	
3508	1.49	23.0		SEAWATER	
3553	1.51	17.0		SEAWATER	
3553	1.50	17.0		SEAWATER	
3572	1.50	17.0		SEAWATER	
3667	1.51	18.0		SEAWATER	
3761	1.50	21.0		SEAWATER	
3776	1.50	21.0		SEAWATER	
3784	1.50	21.0		SEAWATER	
3845	1.51	23.0		SEAWATER	
3927	1.50	22.0		SEAWATER	
3950	1.50	25.0		SEAWATER	

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]
2873 Formation pressure (Formasjonstrykk)	PDF	0.22

