

**General information**

Wellbore name	3/6-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	3/6-1
Seismic location	3D ST 9602 Inline 3466-Crossline 3910
Production licence	238
Drilling operator	Norsk Agip AS
Drill permit	976-L
Drilling facility	TRANSOCEAN NORDIC
Drilling days	21
Entered date	20.06.2000
Completed date	10.07.2000
Release date	10.07.2002
Publication date	18.12.2002
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	34.0
Water depth [m]	64.0
Total depth (MD) [m RKB]	2167.0
Final vertical depth (TVD) [m RKB]	2167.0
Maximum inclination [°]	0.75
Bottom hole temperature [°C]	70
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	TOR FM
Geodetic datum	ED50
NS degrees	56° 35' 0.14" N
EW degrees	4° 53' 30.35" E
NS UTM [m]	6272751.48
EW UTM [m]	616199.20
UTM zone	31
NPDID wellbore	4117



Wellbore history

General

The purpose of drilling well 3/6-1 was to test the hydrocarbon potential of the Paleocene sandstones of the Intra Lista Formation in the Hilde prospect. The Hilde prospect was a structural four-way dip closure, induced by halokinesis of the Zechstein salt. The Paleocene reservoir pinches out towards the crest of the structure. A secondary target was the Oligocene Lower Skade Sands.

Operations and results

Wildcat well 3/6-1 was drilled with the jack-up installation "Transocean Nordic" to a total depth of 2167 m in the Cretaceous Limestones of the Tor Formation. The legs were pinned on location and the rig accepted to be in position on June 17, 2000. Due to authority requirements a soil boring had to be made before starting the drilling of the well. On 19 June soil sample coring was done down to 128 m. The well was spudded on June 20, 2000. Of 24 days total well time only 4.5% of the total time was unproductive time. From 1047 m to 2003 m gas levels remained between 1,00% and 0,20% except for peaks associated with limestone stringers, these being 3,20% at 1210 m; 3,50% at 1217 m and 1.78% at 1248 m. Gas levels did not exceed 0,50% from 2050 m for the remainder of the well. It is suspected that the high overbalance was responsible for the low gas levels throughout the 12" hole section (1047 m to TD).

The well was drilled with spud mud and sea water / bentonite down to 1047 m and KCl/PAC mud with glycol from 1047 m to TD. The main reservoir of Paleocene age was encountered at 2003 m. Paleocene sandstones of both the Intra Sele and the Intra Lista Formations were encountered in this well. RCI pressure measurements proved that the sandstones were in communication and they could be described as one reservoir unit. The Paleocene sandstones were found water bearing. This was confirmed both by the wireline logs, the formation pressures and sampling. One core was cut in the well (2008 m to 2011.5 m). Three wire line samples were taken at 1622 m (Oligocene), 2009 m (Paleocene), and 2075 m (Paleocene). All three contained water, but phenols analysis of the samples from 2009 and 2075 m gave elevated phenol contents in the range 200 to 300 ppb. Oil shows were recorded from 2008 m to 2010,6 m in sandstone in the core (weak brown fluorescence) and dull brown cut fluorescence in a sidewall core at 2003 m. The secondary target reservoir sand was encountered at 1530 m. It was water bearing with no indications of hydrocarbons. The well was plugged and abandoned as a dry well on July 10.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
190.00	2167.00

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	2008.0	2010.6	[m]

Total core sample length [m]	2.6
Cores available for sampling?	YES

Core photos

2008-2022m

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
98	NORDLAND GP
791	HORDALAND GP
1081	NO FORMAL NAME
1093	NO FORMAL NAME
1116	NO FORMAL NAME
1129	NO FORMAL NAME
1530	VADE FM
1639	NO FORMAL NAME
1931	ROGALAND GP
1931	BALDER FM
1957	SELE FM
2002	FISKEBANK FM
2033	LISTA FM
2051	NO FORMAL NAME
2092	SHETLAND GP
2092	EKOFISK FM



Composite logs

Document name	Document format	Document size [MB]
4117	pdf	0.31

Geochemical information

Document name	Document format	Document size [MB]
4117_1	pdf	0.41

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

Document name	Document format	Document size [MB]
4117_3_6_1_COMPLETION_REPORT	.pdf	2.56

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CST GR	1518	2115
HDLL MAC HLL TTRM GR	998	2139
MWD - MPT GR DIR RE	181	2167
RCI TTRM GR	1532	2119
STAR-II TTRM GR	1052	2148
VSP GR	800	2136
ZDL CN DSL TTRM GR	1012	2148

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	180.0	36	180.0	0.00	LOT
INTERM.	13 3/8	1047.0	17 1/2	1047.0	1.65	LOT
OPEN HOLE		2167.0	12 1/4	2167.0	0.00	LOT



**Drilling mud**

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
180	1.05			SPUD MUD	
708	1.12	4.0		SW/BENTONITE	
973	1.20	4.0		SW/BENTONITE	
1047	1.20	6.0		SW/BENTONITE	
1085	1.30	19.0		KCL/PAC/GLYCOL	
1632	1.35	26.0		KCL/PAC/GLYCOL	
1961	1.39	27.0		KCL/PAC/GLYCOL	
2008	1.39	27.0		KCL/PAC/GLYCOL	
2136	1.39	25.0		KCL/PAC/GLYCOL	
2167	1.35	21.0		KCL/PAC/GLYCOL	

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]
4117 Formation pressure (Formasjonstrykk)	pdf	0.23

