

**General information**

Wellbore name	7228/7-1 A
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	BARENTS SEA
Discovery	7228/7-1 (Pandora)
Well name	7228/7-1
Seismic location	3D ST 9403- INLINE 1378 & CROSSLINE 1557
Production licence	202
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	996-L
Drilling facility	TRANSOCEAN ARCTIC
Drilling days	26
Entered date	08.01.2001
Completed date	02.02.2001
Plugged date	02.02.2001
Release date	02.02.2003
Publication date	11.02.2003
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	LATE TRIASSIC
1st level with HC, formation	SNADD FM
2nd level with HC, age	EARLY TRIASSIC
2nd level with HC, formation	KLAPPMYSS FM
Kelly bushing elevation [m]	24.0
Water depth [m]	288.0
Total depth (MD) [m RKB]	2881.0
Final vertical depth (TVD) [m RKB]	2848.0
Maximum inclination [°]	19.3
Bottom hole temperature [°C]	89
Oldest penetrated age	EARLY TRIASSIC
Oldest penetrated formation	KLAPPMYSS FM
Geodetic datum	ED50



NS degrees	72° 15' 28.9" N
EW degrees	28° 8' 59.7" E
NS UTM [m]	8018306.53
EW UTM [m]	539111.27
UTM zone	35
NPDID wellbore	4257

Wellbore history

General

Wellbore 7228/7-1 A is situated in the Nordkapp basin. The Nordkapp basin is the most pronounced structural element east of Loppa High, with a basinal-axis oriented NE-SW. From top Cretaceous and down to TD of the well the sediments are steeply dipping due to salt diapirism, with the salt diapir located SE of the surface location. Well 7228/7-1S unexpectedly drilled into a Permian block where the target reservoir was prognosed and so did not reach the main target for the planned well. Based on this result it was decided to drill sidetrack 7228/7-1 A. The main objectives of well 7228/7-1 A was to test the hydrocarbon potential of Upper and Middle Triassic sandstones of the Snadd Formation.

Operations and results

Well 7228/7-1 A was kicked off from well 7228/7-1 S T3 below the 13 3/8" casing shoe at 1341 m on 8 January 2001 and drilled with the semi-submersible installation "Transocean Arctic" to a total depth of 2881 m in the Early Triassic (Spathian) Klappmys Formation. The well was drilled with "Glydril" mud (KCl / Polymer / glycol) from kick-off to TD. As in 7228/7-1 S several good reservoir zones were penetrated in the Jurassic section, the Stø Formation, the Nordmela Formation and the Tubåen Formation. The Jurassic reservoirs were water wet as proved in 7228/7-1 S T3. Good reservoir zones were also penetrated in Snadd and Klappmys Formations in the Triassic section. The Lower Carnian sandstones in the Snadd Formation proved to be gas and oil bearing, whilst the Klappmys Formation was gas bearing. This was verified both by shows on cores, logs, samples and laboratory studies of the cores. Both hydrocarbon bearing reservoir zones were cored. Two of these were cut in the Snadd Formation, one in the Kobbe Formation, and one in the Klappmys Formation. Wire line MDT gas samples were taken at 2051.1 m and 2057.5 m, while a MDT oil sample was taken at 2091.1 m. The samples were considered of good quality. Well 7228/7-1 A proved an oil-down-to situation in the Lower Carnian sandstone at 2100 m (2078 m TVD RKB, 2054 m TVD MSL). The gas to oil contact was estimated at approximately 2086 m (2064 m TVD RKB, 2040 m TVD MSL). It was decided to drill a sidetrack in order to verify the oil-water contact. Well 7228/7-1 A was permanently abandoned as an oil and gas discovery on 2 February 2001.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1344.00	2880.00



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	2059.0	2074.7	[m]
2	2075.1	2102.8	[m]
3	2455.0	2457.3	[m]
4	2833.0	2860.9	[m]

Total core sample length [m]	73.6
Cores available for sampling?	YES

Core photos



2059-2064m



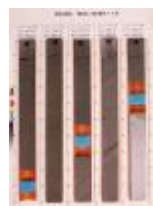
2064-2069m



2069-2074m



2074-2079m



2079-2084m



2084-2089m



2089-2094m



2094-2099m



2099-2456m



2456-2836m



2836-2841m



2841-2846m



2846-2851m



2851-2856m



2856-2860m

Palynological slides at the Norwegian Offshore Directorate



Sample depth	Depth unit	Sample type	Laboratory
2106.6	[m]	C	ICHRON

Oil samples at the Norwegian Offshore Directorate

Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
MDT		2091.10	0.00	CONDE NSATE	23.07.2001 - 00:00	YES
MDT		0.00	0.00	CONDE NSATE	23.07.2001 - 00:00	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
311	NORDLAND GP
334	ADVENTDALEN GP
334	KOLMULE FM
1300	KNURR FM
1314	HEKKINGEN FM
1347	FUGLEN FM
1361	KAPP TOSCANA GP
1361	STØ FM
1379	NORDMELA FM
1399	TUBÅEN FM
1494	FRUHOLMEN FM
1642	SNADD FM
2255	SASSEDALEN GP
2255	KOBBE FM
2741	KLAPPMYSS FM

Composite logs

Document name	Document format	Document size [MB]
4257	pdf	0.45





Geochemical information

Document name	Document format	Document size [MB]
4257_1	pdf	1.83
4257_2	pdf	1.82
4257_3	pdf	2.56
4257_4	pdf	6.08
4257_5	pdf	0.13
4257_6	pdf	5.05

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

Document name	Document format	Document size [MB]
4257_7228_7_1_A_COMPLETION_LOG	.pdf	1.83
4257_7228_7_1_A_COMPLETION_REPORT_NY	.pdf	6.95

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR ECS HNGS ACTS	2023	2115
DSI FMI GR	1323	2881
HRLA PEX HNGS ACTS	1323	2881
MDT ACTS GR	1398	2493
MDT GR	2087	2091
MWD MPR	1341	2059
VSP GR	871	1322
VSP GR	1245	2873

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	372.0	36	373.0	0.00	LOT
INTERM.	20	502.0	26	503.0	1.62	LOT
INTERM.	13 3/8	1323.0	17 1/2	1325.0	1.73	LOT
OPEN HOLE		2881.0	12 1/4	2881.0	0.00	LOT



**Drilling mud**

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1540	1.35	19.0		GLYDRILL	
1764	1.35	18.0		GLYDRILL	
2004	1.34	21.0		GLYDRILL	
2045	1.35	19.0		GLYDRILL	
2098	1.35	20.0		GLYDRILL	
2102	1.35	20.0		GLYDRILL	
2224	1.35	19.0		GLYDRILL	
2833	1.43	27.0		GLYDRILL	
2856	1.43	26.0		GLYDRILL	
2861	1.43	27.0		GLYDRILL	
2881	1.45	28.0		GLYDRILL	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
2100.75	[m]
2841.30	[m]
2843.80	[m]
2853.45	[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]
4257 Formation pressure (Formasjonstrykk)	pdf	0.28

