

**General information**

Wellbore name	7125/4-2
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	BARENTS SEA
Discovery	7125/4-1 (Nucula)
Well name	7125/4-2
Seismic location	3D Survey-MC3D MFZ02.inline 1310 & xline 3250
Production licence	393
Drilling operator	StatoilHydro Petroleum AS
Drill permit	1200-L
Drilling facility	POLAR PIONEER
Drilling days	25
Entered date	07.11.2008
Completed date	01.12.2008
Release date	01.12.2010
Publication date	01.12.2010
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	LATE TRIASSIC
1st level with HC, formation	FRUHOLMEN FM
Kelly bushing elevation [m]	23.0
Water depth [m]	294.0
Total depth (MD) [m RKB]	1750.0
Final vertical depth (TVD) [m RKB]	1750.0
Maximum inclination [°]	1.4
Bottom hole temperature [°C]	64
Oldest penetrated age	EARLY TRIASSIC
Oldest penetrated formation	KLAPPMYSS FM
Geodetic datum	ED50
NS degrees	71° 32' 46.1" N
EW degrees	25° 0' 16.1" E
NS UTM [m]	7939688.97



EW UTM [m]	429506.44
UTM zone	35
NPDID wellbore	5944

Wellbore history

General

The 7125/4-2 Nucula Appraisal well was drilled in the Måsøy Fault Complex in the Barents Sea. The objective was to prove oil or gas in the Nucula B segment, with the Kapp Toscana Group sands as primary target and the lower Kobbe Formation as secondary target.

Operations and results

Appraisal well 7125/4-2 was spudded with the semi-submersible installation Polar Pioneer on 7 November 2008 and drilled to TD at 1750 m in the Early Triassic Klappmyss Formation. No shallow gas was observed. No significant problem was encountered in the operations. The well was drilled with seawater and hi-vis pills down to 503 m and with Glydril mud from 503 m to TD.

The Kapp Toscana Group was encountered at 930 m, under 40 m of Late Jurassic Hekkingen Formation shale. Hydrocarbons were observed in the Kapp Toscana Group down to an OWC at 946 m. MDT pressure points indicated a pressure drop of up to 0.4 bar in the oil zone across the delineating fault between segments C and B. The top reservoir exhibited a similar low net to gross as seen in the first well. Deeper in the Kapp Toscana Group and top Snadd Fm, however, thicker water bearing channel sandstones were observed. Weak oil shows were recorded from 1281 to 1290 m in the base of the Snadd Formation, and from 1536 to 1560 m in the Kobbe Formation.

No cores were cut in the well. The MDT tool was run for pressure measurements, water and oil samples. Oil samples, both 2 3/4 gallon and 18 Gallon samples, was recovered from 940 m, while water samples were recovered from 946.5, 976.4, and 1027.9 m. Due to the good reservoir properties the fluid samples were collected with low drawdown. The oil samples were collected below the bubble point and the water samples had very low contamination of mud filtrate.

The well was permanently abandoned on 1 December 2008 as an oil appraisal well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate



Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
507.00	1750.00

Cuttings available for sampling?	YES
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Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
555.0	[m]	DC	STATHYD
579.0	[m]	DC	STATHYD
591.0	[m]	DC	STATHY
603.0	[m]	DC	STATHY
615.0	[m]	DC	STATHY
630.0	[m]	DC	STATHY
642.0	[m]	DC	STATHY
657.0	[m]	DC	STATHY
669.0	[m]	DC	STATHY
687.0	[m]	DC	STATHY
693.0	[m]	DC	STATHY
705.0	[m]	DC	STATHY
717.0	[m]	DC	STATHY
729.0	[m]	DC	STATHY
741.0	[m]	DC	STATHY
753.0	[m]	DC	STATHY
765.0	[m]	DC	STATHY
777.0	[m]	DC	STATHY
810.0	[m]	DC	STATHY
828.0	[m]	DC	STATHY
837.0	[m]	DC	STATHY
843.0	[m]	DC	STATHY
891.0	[m]	DC	STATHY
899.9	[m]	SWC	STATHY
909.0	[m]	DC	STATHY
918.0	[m]	DC	STATHY
926.0	[m]	SWC	STATHY
930.0	[m]	SWC	STATHY
939.0	[m]	DC	STATHY
948.0	[m]	DC	STATHY
957.0	[m]	DC	STATHY
981.0	[m]	DC	STATHY



1062.0 [m]	DC	STATHY
1071.0 [m]	DC	STATHY
1098.0 [m]	DC	STATHY
1107.0 [m]	DC	STATHY
1113.0 [m]	DC	STATHY
1120.0 [m]	SWC	STATHY
1128.0 [m]	DC	STATHY
1137.0 [m]	DC	STATHY
1146.0 [m]	DC	STATHY
1155.0 [m]	DC	STATHY
1164.0 [m]	DC	STATHY
1173.0 [m]	DC	STATHY
1182.0 [m]	DC	STATHY
1191.0 [m]	DC	STATHY
1200.0 [m]	DC	STATHY
1209.0 [m]	DC	STATHY
1218.0 [m]	DC	STATHY
1227.0 [m]	DC	STATHY
1236.0 [m]	DC	STATHY
1245.0 [m]	DC	STATHY
1254.0 [m]	DC	STATHY
1263.0 [m]	DC	STATHY
1272.0 [m]	DC	STATHY
1281.0 [m]	DC	STATHY
1290.0 [m]	DC	STATHY
1299.0 [m]	DC	STATHY
1308.0 [m]	DC	STATHY
1317.0 [m]	DC	STATHY
1326.0 [m]	DC	STATHY
1335.0 [m]	DC	STATHY
1344.0 [m]	DC	STATHY
1353.0 [m]	DC	STATHY
1362.0 [m]	DC	STATHY
1371.0 [m]	DC	STATHY
1380.0 [m]	DC	STATHY
1389.0 [m]	DC	STATHY
1398.0 [m]	DC	STATHY
1406.0 [m]	DC	STATHY
1407.0 [m]	DC	STATHY
1425.0 [m]	DC	STATHY



1434.0 [m]	DC	STATHY
1443.0 [m]	DC	STATHY
1452.0 [m]	DC	STATHY
1461.0 [m]	DC	STATHY
1470.0 [m]	DC	STATHY
1479.0 [m]	DC	STATHY
1497.0 [m]	DC	STATHY
1506.0 [m]	DC	STATHY
1515.0 [m]	DC	STATHY
1524.0 [m]	DC	STATHY
1533.0 [m]	DC	STATHY
1542.0 [m]	DC	STATHY
1551.0 [m]	DC	STATHY
1560.0 [m]	DC	STATHY
1569.0 [m]	DC	STATHY
1578.0 [m]	DC	STATHY
1587.0 [m]	DC	STATHY
1596.0 [m]	DC	STATHY
1605.0 [m]	DC	STATHY
1614.0 [m]	DC	STATHY
1623.0 [m]	DC	STATHY
1632.0 [m]	DC	STATHY
1641.0 [m]	DC	STATHY
1650.0 [m]	DC	STATHY
1659.0 [m]	DC	STATHY
1668.0 [m]	DC	STATHY
1680.0 [m]	SWC	STATHY
1686.0 [m]	DC	STATHY
1698.0 [m]	DC	STATHY
1707.0 [m]	DC	STATHY
1716.0 [m]	DC	STATHY
1728.0 [m]	DC	STATHY
1734.0 [m]	DC	STATHY
1740.0 [m]	DC	STATHY
1750.0 [m]	DC	STATHY

Lithostratigraphy



Top depth [mMD RKB]	Lithostrat. unit
317	NORDLAND GP
520	TORSK FM
523	NYGRUNNEN GP
523	KVITING FM
553	ADVENTDALEN GP
553	KOLMULE FM
812	KOLJE FM
844	KNURR FM
891	HEKKINGEN FM
930	KAPP TOSCANA GP
930	FRUHOLMEN FM
1026	SNADD FM
1299	SASSEDALEN GP
1299	KOBBE FM
1683	KLAPPMYSS FM

Composite logs

Document name	Document format	Document size [MB]
5944	pdf	0.29

Logs

Log type	Log top depth [m]	Log bottom depth [m]
FMI HNGS HRLA	810	1110
MDT	810	976
MDT	810	1110
MDT	810	1050
MDT	810	810
MDT	1027	1699
MSCT	826	1700
MWD - ARCVRES6 TELE GVR6	811	1750
MWD - ARCVRES8 PP ISONIC8	506	811
MWD - ARCVRES9 TELE VSONIC9	365	506
MWD - POWEROULSE	317	365
PEX ECS MSIP CMR	810	1110





PEX ECS MSIP CMR	1000	1750
PEX MSIP HNGS	503	811
VSP	364	1750

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	365.0	36	365.0	0.00	LOT
SURF.COND.	13 3/8	503.0	17 1/2	503.0	1.60	LOT
INTERM.	9 5/8	810.0	12 1/4	810.0	2.18	LOT
OPEN HOLE		1750.0	8 1/2	1750.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
534	1.29	17.0		Glydril	
758	1.30	17.0		Glydril	
811	1.31	17.0		Glydril	
1081	1.29	18.0		Glydril	
1110	1.30	18.0		Glydril	
1137	1.31	19.0		Glydril	
1750	1.30	16.0		Glydril	

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]
5944 Formation pressure (Formasjonstrykk)	pdf	0.23

