General information

Wellbore name	7324/9-1
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	7324/9-1 (Mercury)
Well name	7324/9-1
Seismic location	3D survey :HFCES011:Inline 5247 & xline 11534
Production licence	614
Drilling operator	Statoil Petroleum AS
Drill permit	1531-L
Drilling facility	TRANSOCEAN SPITSBERGEN
Drilling days	11
Entered date	22.07.2014
Completed date	07.08.2014
Release date	07.08.2016
Publication date	07.08.2016
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	STØ FM
Kelly bushing elevation [m]	40.0
Water depth [m]	414.0
Total depth (MD) [m RKB]	1100.0
Final vertical depth (TVD) [m RKB]	1100.0
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SNADD FM
Geodetic datum	ED50
NS degrees	73° 19' 29.28'' N
EW degrees	24° 50' 24.24'' E
NS UTM [m]	8138186.78
EW UTM [m]	430830.80
UTM zone	35
NPDID wellbore	7527

Wellbore history

General

Well 7324/9-1 was drilled to test the Mercury prospect on the Mercurius High west of the Hoop Fault Complex in the Barents Sea. The primary objective was to prove the presence of hydrocarbons in the Kapp Toscana Group. The secondary objective was to test the presence of hydrocarbons in the Snadd Formation. The well was also a test of one of the main Controlled Source ElectroMagnetic (CSEM) anomalies and its relation to the presence of hydrocarbons

Operations and results

Wildcat well 7324/9-1 was spudded with the semi-submersible installation Transocean Spitsbergen on 22 July 2014 and drilled to TD at 1100 m in the Late Triassic Snadd Formation. No significant problem was encountered in the operations. The well was drilled with seawater and bentonite sweeps down to 508 m and with KCL polymer / GEM WBM from 508 m to TD.

Top of the primary target Kapp Toscana Group was encountered at 696 m. A 10 m column of very dry gas was proven in the Stø Formation. The hydrocarbon/water contact is placed at 706 m based on MDT pressure gradients and resistivity logs. The gas column is substantiated by the CSEM shut-off and the brightest seismic amplitude shut-off levels. No hydrocarbons were proven in the Snadd Formation.

One core was cut from top Stø reservoir at 696.5 m to 723.5 m in the Fruholmen Formation. MDT fluid samples were taken at 699.9 m (gas), 706.7 (filtrate and water), and 709.9 m (water).

The well was permanently abandoned on 7 August 2014 as a technical gas discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
675.00	1100.00

Cuttings available for sampling?	YES

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	696.5	723.4	[m]

Total core sample length [m]	26.9

Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
675.0	[m]	DC	ROBERTSO
678.0	[m]	DC	ROBERT
681.0	[m]	DC	ROBERT
684.0	[m]	DC	ROBERT
687.0	[m]	DC	ROBERT
690.0	[m]	DC	ROBERT
692.2	[m]	SWC	ROBERT
693.0	[m]	DC	ROBERT
693.5	[m]	SWC	ROBERT
696.0	[m]	DC	ROBERT
704.6	[m]	C	ROBERT
706.2	[m]	C	ROBERT
708.7	[m]	C	ROBERT
710.5	[m]	C	ROBERT
712.4	[m]	C	ROBERT
714.4	[m]	C	ROBERT
716.5	[m]	C	ROBERT
718.8	[m]	C	ROBERT
720.2	[m]	C	ROBERT
722.5	[m]	C	ROBERT
726.0	[m]	DC	ROBERT
729.0	[m]	DC	ROBERT
732.0	[m]	DC	ROBERT
735.0	[m]	DC	ROBERT
738.0	[m]	DC	ROBERT
741.0	[m]	DC	ROBERT
744.0	[m]	DC	ROBERT
747.0	[m]	DC	ROBERT
750.0	[m]	DC	ROBERT
756.0	[m]	DC	ROBERT
762.0	[m]	DC	ROBERT
762.6	[m]	SWC	ROBERT
768.0	[m]	DC	ROBERT
774.0	[m]	DC	ROBERT

780.0	[m]	DC	ROBERT
786.0	[m]	DC	ROBERT
792.0	[m]	DC	ROBERT
798.0	[m]	DC	ROBERT
804.0	[m]	DC	ROBERT
810.0	[m]	DC	ROBERT
816.0	[m]	DC	ROBERT
822.0	[m]	DC	ROBERT
828.0	[m]	DC	ROBERT
834.0	[m]	DC	ROBERT
840.0	[m]	DC	ROBERT
852.0	[m]	DC	ROBERT
858.0	[m]	DC	ROBERT
864.0	[m]	DC	ROBERT
870.0	[m]	DC	ROBERT
876.0	[m]	DC	ROBERT
888.0	[m]	DC	ROBERT
903.0	[m]	DC	ROBERT
909.0	[m]	DC	ROBERT
915.0	[m]	DC	ROBERT
921.0	[m]	DC	ROBERT
927.0	[m]	DC	ROBERT
931.6	[m]	SWC	ROBERT
933.0	[m]	DC	ROBERT
939.0	[m]	DC	ROBERT
945.0	[m]	DC	ROBERT
951.0	[m]	DC	ROBERT
957.0	[m]	DC	ROBERT
963.0	[m]	DC	ROBERT
966.8	[m]	SWC	ROBERT
969.0	[m]	DC	ROBERT
975.0	[m]	DC	ROBERT
981.0	[m]	DC	ROBERT
987.0	[m]	DC	ROBERT
993.0	[m]	DC	ROBERT
999.0	[m]	DC	ROBERT
1005.0	[m]	DC	ROBERT
1011.0	[m]	DC	ROBERT
1017.0	[m]	DC	ROBERT
1023.0	[m]	DC	ROBERT

1029.0	[m]	DC	ROBERT
1035.0	[m]	DC	ROBERT
1041.0	[m]	DC	ROBERT
1047.0	[m]	DC	ROBERT
1053.0	[m]	DC	ROBERT
1059.0	[m]	DC	ROBERT
1065.0	[m]	DC	ROBERT
1068.8	[m]	SWC	ROBERT
1071.0	[m]	DC	ROBERT
1077.0	[m]	DC	ROBERT
1083.0	[m]	DC	ROBERT
1089.0	[m]	DC	ROBERT
1095.0	[m]	DC	ROBERT
1100.0	[m]	DC	ROBERT

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
454	NORDLAND GP
454	UNDIFFERENTIATED
512	ADVENTDALEN GP
512	KOLMULE FM
545	UNDIFFERENTIATED
669	KNURR FM
671	HEKKINGEN FM
675	FUGLEN FM
696	KAPP TOSCANA GP
696	STØ FM
704	NORDMELA FM
712	FRUHOLMEN FM
763	SNADD FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
FMI MSIP GR	626	1097
MDT CMR GR VSPZO	444	1090
MSCT	670	1076

MWD - SWD TELE825 ARC8 RAB8	505	668
PEX HRLA ZAIT ECS	661	1081

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	504.7	36	508.0	0.00	
INTERM.	9 5/8	661.4	12 1/4	673.0	0.00	
OPEN HOLE		1100.0	8 1/2	1100.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
669	1.14	18.0		KCl/Polymer/GEM	
724	1.14	32.0		KCl/Polymer/GEM	
829	1.14	30.0		KCl/Polymer/GEM	
1020	1.15	34.0		KCl/Polymer/GEM	
1100	1.16	34.0		KCl/Polymer/GEM	