

**General information**

Wellbore name	7325/4-1
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	7325/4-1 (Gemini Nord)
Well name	7325/4-1
Seismic location	HFC 11.inline 4920.crossline 14516
Production licence	855
Drilling operator	Statoil Petroleum AS
Drill permit	1661-L
Drilling facility	SONGA ENABLER
Drilling days	16
Entered date	19.07.2017
Completed date	03.08.2017
Plugged and abandon date	03.08.2017
Release date	03.08.2019
Publication date	03.08.2019
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	STØ FM
2nd level with HC, age	LATE TRIASSIC
2nd level with HC, formation	SNADD FM
Kelly bushing elevation [m]	32.0
Water depth [m]	447.0
Total depth (MD) [m RKB]	1210.0
Final vertical depth (TVD) [m RKB]	1210.0
Maximum inclination [°]	2.8
Bottom hole temperature [°C]	34
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SNADD FM
Geodetic datum	ED50
NS degrees	73° 38' 57.55" N



EW degrees	25° 10' 41.74" E
NS UTM [m]	8174015.52
EW UTM [m]	442761.29
UTM zone	35
NPDID wellbore	8211

Wellbore history

General

Well 7325/4-1 was drilled to test the Gemini prospect in the Hoop Fault Complex in the Barents Sea. The primary objective was to prove oil in the Realgrunnen Subgroup. Secondary objective was to test the Late Triassic Snadd Formation.

Operations and results

A 9 7/8" pilot well (7325/4-U-1) was spudded on 18 July 2017. It was drilled approximately 40 m south-east of the main well location. TD was set at 725 m in Hekkingen Formation, equivalent to the planned setting depth of the 13 3/8" surface casing shoe in the main well. No shallow reservoir was detected.

Wildcat well 7325/4-1 was spudded with the semi-submersible installation Songa Enabler on 19 July 2017 and drilled to TD at 1210 m in the Late Triassic Snadd Formation. Operations proceeded without significant problems, but the sidewall cores from the well were contaminated by a leak of hydraulic oil from the XL-Rock tool. The well was drilled with Seawater and hi-vis sweeps down to 731 m and with KCl/Pol/GEM water-based mud from 731 m to TD.

The top of the reservoir in the Stø Formation, Realgrunnen Subgroup, was encountered at 772 m. The reservoir was seen to be hydrocarbon-bearing, with an approximately 18.5 m gas column. Drop in resistivity and increase in oil shows indicate a gas-water contact at 790.5 m, but this is not conclusive. In the Snadd Formation, a thin oil zone was encountered in the top of a 33 m thick channel sandstone with top at 1120 m. The sandstone is tight, but oil was sampled at 1122.5 m. In addition to shows in the hydrocarbon-bearing reservoirs, oil shows in the form of direct and cut fluorescence, were recorded at 804 m and 843 m.

One core was cut from 773 to 818.4 m with 100% recovery. MDT fluid samples were taken at 790.2 m (gas), 803.5 m (water), 1122.5 m (oil), 1129.5 m (gas), and 859.7 m (water).

The well was permanently abandoned on 3 August 2017 as an oil and 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]
735.00	1210.00



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	773.0	818.4	[m]

Total core sample length [m]	45.4
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
735.0	[m]	DC	CGG
738.0	[m]	SWC	CGG
741.5	[m]	SWC	CGG
750.0	[m]	DC	CGG
756.0	[m]	DC	CGG
762.0	[m]	DC	CGG
768.3	[m]	SWC	CGG
771.0	[m]	SWC	CGG
773.3	[m]	C	CGG
777.5	[m]	C	CGG
781.0	[m]	C	CGG
783.3	[m]	C	CGG
790.4	[m]	C	CGG
791.5	[m]	C	CGG
793.3	[m]	C	CGG
796.3	[m]	C	CGG
801.6	[m]	C	CGG
806.2	[m]	C	CGG
807.9	[m]	C	CGG
809.6	[m]	C	CGG
812.5	[m]	C	CGG
816.0	[m]	C	CGG
818.3	[m]	C	CGG
825.0	[m]	DC	CGG
831.5	[m]	SWC	CGG



838.0 [m]	SWC	CGG
846.0 [m]	DC	CGG
853.3 [m]	SWC	CGG
861.0 [m]	DC	CGG
867.0 [m]	DC	CGG
873.0 [m]	DC	CGG
882.0 [m]	DC	CGG
888.0 [m]	DC	CGG
897.0 [m]	DC	CGG
903.0 [m]	DC	CGG
909.0 [m]	DC	CGG
918.0 [m]	DC	CGG
924.0 [m]	DC	CGG
930.0 [m]	DC	CGG
939.0 [m]	DC	CGG
945.0 [m]	DC	CGG
954.0 [m]	DC	CGG
960.0 [m]	DC	CGG
966.0 [m]	DC	CGG
975.0 [m]	DC	CGG
981.0 [m]	DC	CGG
998.8 [m]	SWC	CGG
1011.0 [m]	DC	CGG
1017.0 [m]	DC	CGG
1023.0 [m]	DC	CGG
1030.7 [m]	SWC	CGG
1038.0 [m]	DC	CGG
1044.0 [m]	DC	CGG
1050.6 [m]	SWC	CGG
1059.0 [m]	DC	CGG
1065.4 [m]	SWC	CGG
1074.0 [m]	DC	CGG
1092.0 [m]	DC	CGG
1098.0 [m]	DC	CGG
1110.0 [m]	DC	CGG
1116.7 [m]	SWC	CGG
1118.3 [m]	SWC	CGG
1134.0 [m]	DC	CGG
1140.0 [m]	DC	CGG
1146.0 [m]	DC	CGG



1155.0	[m]	DC	CGG
1164.6	[m]	SWC	CGG
1166.9	[m]	SWC	CGG
1182.0	[m]	DC	CGG
1188.5	[m]	SWC	CGG
1197.0	[m]	DC	CGG
1203.0	[m]	DC	CGG
1210.0	[m]	DC	CGG

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
479	NORDLAND GP
479	NAUST FM
523	ADVENTDALEN GP
523	KOLMULE FM
650	KOLJE FM
680	KNURR FM
692	HEKKINGEN FM
732	FUGLEN FM
772	KAPP TOSCANA GP
772	STØ FM
792	FRUHOLMEN FM
840	SNADD FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR GR	767	1206
GPIT FMI	729	1206
MSIP HRLA PEX ECS	724	1199
MWD - ARC TELE	485	730
MWD - GVR ARC TELE	730	1210
PQ HY PO IFA SC MS GR	790	1168
PS HY PO PA IFA SC MS GR	797	1145
XL ROCK	738	1188

**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	27	486.0	30	486.0	0.00	
INTERM.	13 3/8	724.0	17 1/2	730.0	0.00	
		735.0		0.0	2.54	FIT
OPEN HOLE		1210.0	12 1/4	1210.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
579	1.17	14.0		KCl/Polymer/GEM	
731	1.14	19.0		KCl/Polymer/GEM	
731	1.03	1.0		Seawater	
773	1.14	20.0		KCl/Polymer/GEM	
818	1.14	18.0		KCl/Polymer/GEM	
912	1.15	16.0		KCl/Polymer/GEM	
1035	1.14	16.0		KCl/Polymer/GEM	
1165	1.14	17.0		KCl/Polymer/GEM	
1210	1.17	17.0		KCl/Polymer/GEM	