

**General information**

Wellbore name	7335/3-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	BARENTS SEA
Well name	7335/3-1
Seismic location	ST14005T15 Inline: 4481. Xline: 8373
Production licence	859
Drilling operator	Equinor Energy AS
Drill permit	1760-L
Drilling facility	WEST HERCULES
Drilling days	34
Entered date	13.05.2019
Completed date	15.06.2019
Plugged and abandon date	15.06.2019
Release date	28.10.2020
Publication date	30.04.2021
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	31.0
Water depth [m]	239.0
Total depth (MD) [m RKB]	4300.0
Final vertical depth (TVD) [m RKB]	4300.0
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	HAVERT FM
Geodetic datum	ED50
NS degrees	73° 59' 49.86" N
EW degrees	35° 50' 13.73" E
NS UTM [m]	8214534.56
EW UTM [m]	402709.14
UTM zone	37
NPDID wellbore	8735



Wellbore history

Well 7335/3-1 was drilled to test the Korpjell Deep on the Haapet Dome far north-east on the Bjarmeland Platform in the Barents Sea. The prospect is a faulted dome, divided into several segments, separated by faults and saddle points. Well 7335/3-1 was the second well drilled on the structure. The primary objective was to test the Realgrunnen Subgroup within the Kapp Toscana Group in segment B, and if oil is discovered, to acquire enough data to determine commerciality and need of appraisal wells. The secondary objectives were to test 4 deeper targets within the central segments: the Intra Snadd Formation Carnian sandstone, the Kobbe Formation, the Havert Formation and Havert clinoforms. The well should also clarify presence of Late Permian source rocks (Ørret Formation), if feasible. The well was committed to drill to 4000 m MSL.

Operations and results

A 9 7/8" pilot well (7335/3-U-1) was drilled ca 26 m southeast of the main well to confirm the stratigraphic depth prognosis in order to prevent riserless drilling into reservoir in main well. The pilot was drilled to 547 m, below setting depth for the 20" casing shoe in the main well. No shallow gas or water flow was observed and the prognosed stratigraphy was confirmed.

Wildcat well 7335/33-1 was spudded with the semi-submersible installation West Hercules on 13 May 2019 and drilled to TD at 4300 m in the Triassic Havert Formation. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 537 m, with Glydril mud from 537 to from 1046 m and with Exploradril oil-based mud from 1046 m to TD.

Water filled reservoir with good reservoir properties was encountered within the Realgrunnen Subgroup. The well encountered sandy but tight intervals within the Havert Formation (primary target) and in the Klappmyss Formation. Tight sands were also encountered within the Kobbe and Snadd formations. The well TD'd above the Permian, so potential source rock within the Ørret Formation was not evaluated.

No conclusive shows were recorded in the well. Direct fluorescence (no cut) in the interval 980 to 1027 m was observed in carbonaceous claystone in the Snadd Formation. Elevated mud gas was recorded in the same interval. The gas was however dry and believed to be related to the rather extensive coal layers and carbonaceous claystones observed in the ditch cuttings. Other observed fluorescence in the sections that was drilled water-based is interpreted as mineral fluorescence or even due to the glycol additive in the mud. In the oil-based sections no oil shows were observed on cuttings or sidewall cores. Several relative high peaks with very dry gas were however registered in the lower Havert Formation

No cores were cut. No fluid sample was taken.

The well was permanently abandoned on 15 June 2019 as a dry well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate



Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
540.00	4300.00

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

Sample depth	Depth unit	Sample type	Laboratory
540.0	[m]	DC	CGG
543.0	[m]	DC	CGG
549.0	[m]	DC	CGG
555.0	[m]	DC	CGG
561.0	[m]	DC	CGG
567.0	[m]	DC	CGG
573.0	[m]	DC	CGG
576.0	[m]	DC	CGG
579.0	[m]	DC	CGG
582.0	[m]	DC	CGG
591.0	[m]	DC	CGG
600.0	[m]	DC	CGG
609.0	[m]	DC	CGG
618.0	[m]	DC	CGG
627.0	[m]	DC	CGG
636.0	[m]	DC	CGG
644.0	[m]	DC	CGG
654.0	[m]	DC	CGG
663.0	[m]	DC	CGG
669.0	[m]	DC	CGG
678.0	[m]	DC	CGG
687.0	[m]	DC	CGG
696.0	[m]	DC	CGG
705.0	[m]	DC	CGG
714.0	[m]	DC	CGG
723.0	[m]	DC	CGG
732.0	[m]	DC	CGG
741.0	[m]	DC	CGG
750.0	[m]	DC	CGG
759.0	[m]	DC	CGG
768.0	[m]	DC	CGG
777.0	[m]	DC	CGG



786.0 [m]	DC	CGG
795.0 [m]	DC	CGG
804.0 [m]	DC	CGG
813.0 [m]	DC	CGG
822.0 [m]	DC	CGG
831.0 [m]	DC	CGG
840.0 [m]	DC	CGG
849.0 [m]	DC	CGG
858.0 [m]	DC	CGG
867.0 [m]	DC	CGG
876.0 [m]	DC	CGG
885.0 [m]	DC	CGG
894.0 [m]	DC	CGG
903.0 [m]	DC	CGG
912.0 [m]	DC	CGG
921.0 [m]	DC	CGG
930.0 [m]	DC	CGG
939.0 [m]	DC	CGG
948.0 [m]	DC	CGG
957.0 [m]	DC	CGG
966.0 [m]	DC	CGG
975.0 [m]	DC	CGG
984.0 [m]	DC	CGG
993.0 [m]	DC	CGG
1002.0 [m]	DC	CGG
1011.0 [m]	DC	CGG
1020.0 [m]	DC	CGG
1029.0 [m]	DC	CGG
1038.0 [m]	DC	CGG
1046.0 [m]	DC	CGG
1056.0 [m]	DC	CGG
1065.0 [m]	DC	CGG
1077.0 [m]	DC	CGG
1095.0 [m]	DC	CGG
1113.0 [m]	DC	CGG
1131.0 [m]	DC	CGG
1149.0 [m]	DC	CGG
1158.0 [m]	DC	CGG
1167.0 [m]	DC	CGG
1176.0 [m]	DC	CGG



1185.0 [m]	DC	CGG
1194.0 [m]	DC	CGG
1203.0 [m]	DC	CGG
1212.0 [m]	DC	CGG
1221.0 [m]	DC	CGG
1230.0 [m]	DC	CGG
1239.0 [m]	DC	CGG
1266.0 [m]	DC	CGG
1293.0 [m]	DC	CGG
1320.0 [m]	DC	CGG
1347.0 [m]	DC	CGG
1374.0 [m]	DC	CGG
1401.0 [m]	DC	CGG
1428.0 [m]	DC	CGG
1455.0 [m]	DC	CGG
1482.0 [m]	DC	CGG
1509.0 [m]	DC	CGG
1536.0 [m]	DC	CGG
1563.0 [m]	DC	CGG
1590.0 [m]	DC	CGG
1617.0 [m]	DC	CGG
1644.0 [m]	DC	CGG
1671.0 [m]	DC	CGG
1698.0 [m]	DC	CGG
1725.0 [m]	DC	CGG
1752.0 [m]	DC	CGG
1779.0 [m]	DC	CGG
1806.0 [m]	DC	CGG
1833.0 [m]	DC	CGG
1860.0 [m]	DC	CGG
1887.0 [m]	DC	CGG
1914.0 [m]	DC	CGG
1941.0 [m]	DC	CGG
1968.0 [m]	DC	CGG
1995.0 [m]	DC	CGG
2022.0 [m]	DC	CGG
2049.0 [m]	DC	CGG
2076.0 [m]	DC	CGG
2103.0 [m]	DC	CGG
2130.0 [m]	DC	CGG



2157.0	[m]	DC	CGG
2184.0	[m]	DC	CGG
2211.0	[m]	DC	CGG
2238.0	[m]	DC	CGG
2265.0	[m]	DC	CGG
2631.4	[m]	SWC	CGG
2790.0	[m]	DC	CGG
2826.0	[m]	DC	CGG
2871.0	[m]	DC	CGG
2898.0	[m]	DC	CGG
2925.0	[m]	DC	CGG
2952.0	[m]	DC	CGG
2969.0	[m]	SWC	CGG
2991.0	[m]	DC	CGG
3018.0	[m]	DC	CGG
3045.0	[m]	DC	CGG
3072.0	[m]	DC	CGG
3099.0	[m]	DC	CGG
3126.0	[m]	DC	CGG
3153.0	[m]	DC	CGG
3180.0	[m]	DC	CGG
3195.0	[m]	SWC	CGG
3222.0	[m]	DC	CGG
3249.0	[m]	DC	CGG
3276.0	[m]	DC	CGG
3303.0	[m]	DC	CGG
3330.0	[m]	DC	CGG
3357.0	[m]	DC	CGG
3381.0	[m]	DC	CGG
3408.0	[m]	DC	CGG
3431.0	[m]	SWC	CGG
3444.0	[m]	DC	CGG
3471.0	[m]	DC	CGG
3498.0	[m]	DC	CGG
3525.0	[m]	DC	CGG
3552.0	[m]	DC	CGG
3579.0	[m]	DC	CGG
3606.0	[m]	DC	CGG
3633.0	[m]	DC	CGG
3650.0	[m]	SWC	CGG



3669.0	[m]	DC	CGG
3696.0	[m]	DC	CGG
3723.0	[m]	DC	CGG
3744.0	[m]	SWC	CGG
3768.0	[m]	DC	CGG
3795.0	[m]	DC	CGG
3822.0	[m]	DC	CGG
3848.0	[m]	SWC	CGG
3858.0	[m]	SWC	CGG
3869.4	[m]	SWC	CGG
3880.0	[m]	SWC	CGG
3903.0	[m]	DC	CGG
3930.0	[m]	DC	CGG
3957.0	[m]	DC	CGG
3979.0	[m]	SWC	CGG
4000.0	[m]	SWC	CGG
4017.0	[m]	DC	CGG
4044.0	[m]	DC	CGG
4062.5	[m]	SWC	CGG
4071.3	[m]	SWC	CGG
4087.5	[m]	SWC	CGG
4112.5	[m]	SWC	CGG
4130.0	[m]	DC	CGG
4145.0	[m]	SWC	CGG
4173.0	[m]	DC	CGG
4199.0	[m]	SWC	CGG
4224.0	[m]	DC	CGG
4251.0	[m]	DC	CGG
4270.2	[m]	SWC	CGG
4284.0	[m]	DC	CGG
4300.0	[m]	DC	CGG

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
270	NORDLAND GP
275	ADVENTDALEN GP
275	KOLMULE FM
491	KLIPPFISK FM



496	HEKKINGEN FM
543	FUGLEN FM
577	KAPP TOSCANA GP
577	STØ FM
580	NORDMELA FM
644	TUBÅEN FM
665	FRUHOLMEN FM
801	SNADD FM
1162	SASSENDALEN GP
1162	KOBBE FM
1618	KLAPPMYSS FM
3060	HAVERT FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - ARC TELE	322	644
MWD - PD ARC TELE	644	1046
MWD - PD GVR ARC TELE SS ADN WDP	1046	2601
MWD - PD GVR ES TS SS WDP	2601	4300
MWD - TELE	270	322
XLR	2631	4270
ZO VSP	256	4279

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	36	318.4	42	322.6	0.00	
SURF.COND.	20	531.2	26	537.0	1.64	FIT
PILOT HOLE		644.0	12 1/4	644.0	0.00	
INTERM.	13 5/8	1040.6	16	1046.0	2.06	LOT
INTERM.	9 5/8	2600.0	12 1/4	2601.0	1.77	LOT
OPEN HOLE		4300.0	8 1/2	4300.0	0.00	

Drilling mud



Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
492	1.18	17.5		Glydril	
492	1.18	17.5		Seawater	
590	1.14	14.0		Glydril	
1041	1.14	17.0		Glydril	
1049	1.14	15.0		EMS 4400	
2380	1.14	16.0		EMS 4400	
2703	1.14	17.0		EMS 4400	
3862	1.16	16.0		EMS 4400	
4035	1.17	17.5		EMS 4400	
4300	1.18	17.5		EMS 4400	