General information

Wellbore name	35/9-13
Type	EXPLORATION
Purpose	WILDCAT
Status	JUNKED
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	35/9-13
Seismic location	HORDA (CGG 14003) Inline 8657. Xline 30375
Production licence	682
Drilling operator	Spirit Energy Norge AS
Drill permit	1674-L
Drilling facility	SONGA ENABLER
Drilling days	27
Entered date	25.12.2017
Completed date	20.01.2018
Plugged date	29.03.2018
Plugged and abondon date	29.03.2018
Release date	03.09.2019
Publication date	20.01.2020
Purpose - planned	WILDCAT
Reentry	NO
Content	NOT APPLICABLE
Discovery wellbore	NO
Kelly bushing elevation [m]	32.0
Water depth [m]	365.0
Total depth (MD) [m RKB]	3223.0
Final vertical depth (TVD) [m RKB]	3223.0
Maximum inclination [°]	1
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	RØDBY FM
Geodetic datum	ED50
NS degrees	61° 25' 20.34'' N
EW degrees	3° 49' 39.74'' E
NS UTM [m]	6810270.95
EW UTM [m]	544172.97
UTM zone	31
NPDID wellbore	8288

Wellbore history

General

Well 35/9-13 was drilled to test the Tethys prospect on the Måløy slope in the northern North Sea. The primary objective was to test the hydrocarbon potential in Intra-Heather sandstone of Oxfordian age. Dependent on the results of the well, optional production testing was planned to test reservoir productivity, in addition to an optional side-track to further evaluate the prospect.

Operations and results

A 9 7/8" pilot hole was drilled 30 m off location from the 35/9-13 well. No shallow gas or water flow was observed.

Wildcat well 35/9-13 was spudded with the semi-submersible installation Songa Enabler on 25 December. At 2555 m in the Tryggvason Formation the bit drilled into a fault zone and total losses occurred. Losses were cured with fibrous materials and reduction of mud weight. Drilling of the 12 ¼ hole commenced to 3223 m in the Early Jurassic Rødby Formation. While running in hole with the 8 1/2" BHA the operation was stopped at 1770 m due to observation of a

water flow around the well head. The water flow was identified flowing outside the 20” casing because of bad cement bond. The water most likely came from ca 661 m in the top of a Paleogene sand. It was decided to P&A the well for safety reasons. The well was drilled with seawater and hi-vis pills down to 948 m, with KCl/GEM/polymer mud from 948 m to 1822 m, and with Innovert oil-based mud from 1822 m to TD.

The well did not fulfil its objectives.

The only log on wire line was a CBL log to evaluate the cement behind the casing and source of the shallow water flow. No reliable formation temperature could be recorded. No cores were cut. No fluid sample was taken.

The well was permanently abandoned on 29 March 2018 as a junk well. Replacement well 35/9-14 was spudded ca 30 m to the south-east.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
960.00	3220.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
397	NORDLAND GP
590	UTSIRA FM
637	HORDALAND GP
661	NO FORMAL NAME
846	NO FORMAL NAME
875	ROGALAND GP
875	BALDER FM
938	SELE FM
952	LISTA FM
1302	VÅLE FM
1390	SHETLAND GP
1390	JORSALFARE FM
1519	KYRRE FM
2508	TRYGGVASON FM
2743	BLODØKS FM
2776	SVARTE FM
3168	CROMER KNOLL GP
3168	RØDBY FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - GR	399	464
MWD - GR RES	464	948
MWD - GR RES SON	399	950
MWD - GR RES SON	948	1822
MWD - GR RES SON NEU DEN USC	1822	3223

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	462.0	36	462.0	0.00	
SURF.COND.	20	942.0	26	948.0	1.35	FIT
INTERM.	13 3/8	1817.0	17 1/2	1822.0	1.50	FIT
LINER	9 5/8	3222.0	12 1/4	3224.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
948	1.20	15.0		KCl/Polymer/GEM	
948	1.39	20.0		Spud Mud	
1024	1.20	13.0		KCl/Polymer/GEM	
1822	1.25	13.0		Innovert	
1822	1.20	11.0		KCl/Polymer/GEM	
1945	1.26	17.0		Innovert	
2555	1.26	13.0		Innovert	
3224	1.24	15.0		Innovert	
3224	1.23	10.0		KCl/Polymer/GEM	