



General information

Wellbore name	35/9-14 A
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	35/9-14
Well name	35/9-14
Seismic location	HORDA (CGG 14003) Inline 8659. Xline 30374
Production licence	682
Drilling operator	Spirit Energy Norge AS
Drill permit	1693-L
Drilling facility	SONGA ENABLER
Drilling days	26
Entered date	04.03.2018
Completed date	29.03.2018
Plugged date	29.03.2018
Plugged and abandon date	29.03.2018
Release date	29.03.2020
Publication date	29.03.2020
Purpose - planned	APPRAISAL
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	32.0
Water depth [m]	365.0
Total depth (MD) [m RKB]	3900.0
Final vertical depth (TVD) [m RKB]	3739.0
Maximum inclination [°]	27.7
Bottom hole temperature [°C]	120
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	HEATHER FM
Geodetic datum	ED50
NS degrees	61° 25' 19.87" N
EW degrees	3° 49' 41.93" E
NS UTM [m]	6810256.82



EW UTM [m]	544205.62
UTM zone	31
NPDID wellbore	8397

Wellbore history

General

Well 35/9-14 A is a geological side-track to 35/9-14 on the Måløy Måløy slope in the northern North Sea. Well 35/9-14 found oil in poor quality Intra-Heather Formation sandstone. The primary objective of the side-track was to further evaluate this discovery in a down-dip position.

Operations and results

Appraisal well 35/9-14 A was kicked out of the 13 3/8" casing at 1776 m on 4 March 2018. It was drilled with the semi-submersible installation Sona Enabler to TD at 3900 m (3739 m TVD) m in the Middle Jurassic Heather Formation. Operations proceeded without significant problems. The well was drilled with Innovert oil-based mud from kick-off to TD.

Intra-Heather Formation waterfilled sandstone was penetrated from 3755 to 3848 m (3592.2 to 3685.7 m TVD). It contained 32 m of net reservoir sandstones with average 13.3 % average porosity. Hydrocarbon indications in well 35/9-14 A were reported only from the Intra-Heather sandstones and ranged from no shows to local HC odour and direct fluorescence and fast streaming cut. Combined pressure data from both wells 35/9-14 and 35/9-14 A indicated an on-structure OWC in the range 3748 to 3751 m (3587 to 3590 m TVD).

One 54 m conventional core was cut from 3813 to 3867 m in the lower part of the Intra Heather Formation sandstone and into the Heather mudstone below. MDT fluid samples were taken at 3770.2 m (3609.4 m TVD; water only) and 3782 m (3621.2 m TVD; water and oil).

The well was permanently abandoned on 29 March 2018 as a dry well with shows.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
3470.00	3899.00

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	3813.0	3866.1	[m]

Total core sample length [m]	53.1
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
396	NORDLAND GP
591	UTSIRA FM
638	HORDALAND GP
660	NO FORMAL NAME
841	HORDALAND GP
872	ROGALAND GP
872	BALDER FM
943	SELE FM
959	LISTA FM
1298	VÅLE FM
1382	SHETLAND GP
1382	JORSALFARE FM
1518	KYRRE FM
2606	TRYGGVASON FM
2933	BLODØKS FM
2968	SVARTE FM
3384	RØDBY FM
3577	ÅSGARD FM
3650	VIKING GP
3650	DRAUPNE FM
3702	HEATHER FM
3755	INTRA HEATHER FM SS
3848	HEATHER FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR MDT SAT IFA	3700	3900



GR XL ROCK	3630	3890
LWD - TELE ECO SONVIS SONSCOPE	1474	3900

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
INTERM.	13 3/8	1475.0	17 1/2	1479.0	1.40	FIT
LINER	9 5/8	3465.2	12 1/4	3468.0	1.50	FIT
OPEN HOLE		3900.0	8 1/2	3900.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
670	1.18	9.0		KCl/Polymer/GEM	
1475	1.22	17.0		Innovert	
1954	1.20	16.0		Innovert	
2800	1.21	18.0		Innovert	
2834	1.28	23.0		Innovert	
3033	1.23	20.0		Innovert	
3305	1.24	20.0		Innovert	
3346	1.27	21.0		Innovert	
3424	1.24	20.0		Innovert	
3461	1.27	22.0		Innovert	
3461	1.30	23.0		Innovert	
3467	1.24	18.0		Innovert	
3479	1.30	24.0		Innovert	
3479	1.27	22.0		Innovert	
3494	1.27	12.0		Innovert	
3900	1.27	22.0		Innovert	