

**General information**

Wellbore name	35/12-6 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	35/12-6 S (Kallåsen)
Well name	35/12-6
Seismic location	Inline 8469/8470. Xline 28650
Production licence	925
Drilling operator	Wellesley Petroleum AS
Drill permit	1695-L
Drilling facility	TRANSOCEAN ARCTIC
Drilling days	32
Entered date	13.05.2018
Completed date	14.06.2018
Plugged date	14.06.2018
Release date	14.06.2020
Publication date	14.06.2020
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	LATE JURASSIC
1st level with HC, formation	FENSFJORD FM
Kelly bushing elevation [m]	24.0
Water depth [m]	355.0
Total depth (MD) [m RKB]	3370.0
Final vertical depth (TVD) [m RKB]	3211.0
Maximum inclination [°]	30.6
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	OSEBERG FM
Geodetic datum	ED50
NS degrees	61° 13' 45.08" N
EW degrees	3° 45' 25.28" E
NS UTM [m]	6788712.72
EW UTM [m]	540650.26



UTM zone	31
NPDID wellbore	8431

Wellbore history

General

Well 35/12-6 S was drilled to test the Kallåsen prospect on the Uer Terrace south-east of the 35/9-7 Nova discovery in the North Sea. The primary objective was to prove commercial hydrocarbon volumes in Fensfjord Formation sands.

Operations and results

Wildcat well 35/12-6 S was spudded with the semi-submersible installation Transocean Arctic on 13 May 2018 and drilled to TD at 3370 m in the Middle Jurassic Oseberg Formation. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 445 m, with KCl/polymer/GEM mud with 4-6% glycols from 445 m to 1054 m, and with Innovert oil-based mud from 1054 m to TD.

The well penetrated a 39.8 m TVD thick, heterolithic Fensfjord Formation from 2997 m (2840.1 m TVD) to 3036.8 m (2879.9 m TVD). The reservoir is oil-bearing in the upper part down-to ca 3011 m (2854 m TVD), whereas an isolated sandstone in the basal part of the formation is water bearing. The proven oil column in-well is 14.4 m of which 3.1 m is effective reservoir of moderate quality. Oil shows, possibly OBM contamination, were described only in the oil-bearing Fensfjord Formation reservoir section.

One core was cut from 3013 m to 3066.93 m with 99.9% recovery. MDT fluid samples were taken at 2998.28 m (oil) and 3007.6 m (OBM filtrate and oil), while fluid scanning at station 3010.2 gave oil+irreducible water and scanning at station 3032.1 gave formation water.

The well was permanently abandoned on 13 June 2018 as an oil discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
450.00	3368.00

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	3013.0	3066.9	[m]



Total core sample length [m]	53.9
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
379	NORDLAND GP
563	UTSIRA FM
579	HORDALAND GP
895	FRIGG FM
950	ROGALAND GP
950	BALDER FM
1011	SELE FM
1054	LISTA FM
1198	NO FORMAL NAME
1325	LISTA FM
1588	VÅLE FM
1649	SHETLAND GP
1649	JORSALFARE FM
2484	TRYGGVASON FM
2607	BLODØKS FM
2617	SVARTE FM
2719	CROMER KNOLL GP
2719	SOLA FM
2762	ÅSGARD FM
2903	VIKING GP
2903	DRAUPNE FM
2918	HEATHER FM
2997	FENSFJORD FM
3037	HEATHER FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AIT PEX NEXT HNGS CMR	2865	3103
LWD - DIR FPDW AC	2878	3370
LWD - DIR INC	379	444



LWD - DIR INC APWD GR RES AC	444	1049
LWD - GR DIR INC APWD RES AC	1047	2878
LWD - GR RES APWD DEN RES NEU	2878	3370
MDT GR	2988	3134
VSIP	489	3370
ZAIT ADT MSIP NGI	2849	3370

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	444.7	36	445.0	0.00	
INTERM.	13 3/8	1047.4	17 1/2	1054.0	1.45	FIT
INTERM.	9 5/8	2869.0	12 1/4	2878.0	1.55	FIT
OPEN HOLE		3370.0	8 1/2	3370.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
379	1.49	5.0		Kill/Displacement Mud	
445	1.39	30.0		KCL/Gem/Pol Water ased mud	
445	1.49	7.0		Kill/displacement mud	
505	1.39	24.0		KCL/Gem/Pol Water based mud	
906	1.35	25.0		KCL/Gem/Pol Water based mud	
906	1.39	33.0		KCL/Gem/Pol Water based mud	
1005	1.31	24.0		INNOVERT	
1054	1.30	15.0		INNOVERT	
1054	1.39	28.0		KCL/Gem/Pol WBM	
1088	1.31	16.0		INNOVERT	
2199	1.31	32.0		INNOVERT	
2698	1.31	26.0		INNOVERT	
2698	1.22	21.0		INNOVERT	
2878	1.31	26.0		INNOVERT	



2878	1.17	11.0		INNOVERT	
2887	1.19	12.0		INNOVERT	
2902	1.21	21.0		INNOVERT	
3000	1.19	12.0		INNOVERT	
3235	1.20	18.0		INNOVERT	
3370	1.20	21.0		INNOVERT	
3370	1.19	21.0		INNOVERT	