

**General information**

Wellbore name	6507/5-8
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Field	SKARV
Discovery	6507/5-3 Ærfugl
Well name	6507/5-8
Seismic location	MC3D-HVG2012MBPR16. Inlin 6858. Crossline 4674
Production licence	212
Drilling operator	Aker BP ASA
Drill permit	1689-L
Drilling facility	DEEPSEA STAVANGER
Drilling days	32
Entered date	24.02.2018
Completed date	27.03.2018
Plugged and abandon date	27.03.2018
Release date	27.03.2020
Publication date	27.03.2020
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	NO
1st level with HC, age	LATE CRETACEOUS
1st level with HC, formation	LYSING FM
Kelly bushing elevation [m]	30.0
Water depth [m]	408.0
Total depth (MD) [m RKB]	3690.0
Final vertical depth (TVD) [m RKB]	3689.0
Maximum inclination [°]	4.9
Bottom hole temperature [°C]	126
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	LANGE FM
Geodetic datum	ED50
NS degrees	65° 41' 58.46" N



EW degrees	7° 32' 23.19" E
NS UTM [m]	7287386.82
EW UTM [m]	432948.05
UTM zone	32
NPDID wellbore	8379

Wellbore history

General

Well 6507/5-8 was drilled to test the Kvitungen Tumler prospect on the Revfallet Fault Complex in the Norwegian Sea. The primary objective was to prove the reservoir and hydrocarbon potential in the Cretaceous Lange Formation. A secondary objective was to appraise the Ærfugl gas discovery (formerly known as Snadd) by acquiring a conventional core in the Lysing Formation and performing two firm wireline runs.

Operations and results

Wildcat well 6507/5-8 was spudded with the semi-submersible installation Deepsea Stavanger on 24 February 2018 and drilled to TD at 3690 m in the Early Cretaceous Lange Formation. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 1310 m and with Innovert oil-based mud from 1310 m to TD.

The Lysing Formation (Ærfugl discovery) was penetrated from 2800 to 2830 m and was confirmed to be gas-filled as expected. The Kvitungen Tumler reservoir was penetrated from 3440 to 3500 m. It consists of interbedded sandstones of Early Cenomanian to Late Albian age. The gross thickness of the reservoir was 80 m which of 40 m was net sand. The average porosity was 0.14, but the permeability was poor due to overgrowth of illite/chlorite. The formation was water wet, but residual oil was present

A core of 33 m comprising the entire Ærfugl reservoir interval was cut. MDT fluid samples were taken at 2827.07 m (gas) and 3485.01 m (water)

The well was permanently abandoned on 27 March 2018.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
530.00	3690.00

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	2799.0	2833.3	[m]

Total core sample length [m]	34.3
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
438	NORDLAND GP
502	NAUST FM
1403	KAI FM
1818	HORDALAND GP
1818	BRYGGE FM
1990	ROGALAND GP
1990	TARE FM
2045	TANG FM
2088	SHETLAND GP
2088	SPRINGAR FM
2195	NISE FM
2582	KVITNOS FM
2800	CROMER KNOLL GP
2800	LYSING FM
2830	LANGE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL IMG	3030	3685
GR PRESSURE	2803	2827
GR PRESSURE	3165	3618
GR SWC	3122	3684
LWD - COREBIT	2797	2833
LWD - DIR PWD	408	520
LWD - DIR PWD GR ABRES	2417	2797
LWD - DIR PWD GR ABRES	2833	3035
LWD - DIR PWD GR RES	520	2417



LWD - DIR PWD GR RES DEN SON PR	3035	3690
SP GR DEN NEU CS SON AI	1900	3036
VSP	3054	3670

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	525.0	36	527.0	0.00	
SURF.COND.	20	1299.0	26	1310.0	1.63	FIT
INTERM.	13 3/8	2411.0	16	2417.0	1.63	FIT
INTERM.	9 5/8	3034.0	12 1/4	3035.0	0.00	
OPEN HOLE		3690.0	8 1/2	3690.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
30	1.39			Water	
525	1.03			Water	
525	1.39			Water	
549	1.20			Water	
762	1.25			Water	
1310	1.27			Water	
1477	1.49			Synthetic	
1947	1.50			Synthetic	
2417	1.46			Synthetic	
2417	1.51			Synthetic	
2450	1.45			Synthetic	
2796	1.46			Synthetic	
3034	1.49			Synthetic	
3035	1.52			Synthetic	
3035	1.49			Synthetic	
3100	1.52			Synthetic	
3690	1.63			Synthetic	
3690	1.52			Synthetic	