



General information





Wellbore name	6506/5-1 S
Type	EXPLORATION
Purpose	WILDCAT
Status	PLUGGED
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Discovery	6506/5-1 S (Nidhogg)
Well name	6506/5-1
Seismic location	WP18304-02013 / WP18304-04017
Production licence	1008
Drilling operator	Aker BP ASA
Drill permit	1803-L
Drilling facility	DEEPSEA NORDKAPP
Drilling days	52
Entered date	30.01.2020
Completed date	21.03.2020
Plugged date	21.03.2020
Release date	21.03.2022
Publication date	08.08.2022
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	YES
1st level with HC, age	LATE CRETACEOUS
1st level with HC, formation	LYSING FM
Kelly bushing elevation [m]	32.7
Water depth [m]	409.0
Total depth (MD) [m RKB]	3225.0
Final vertical depth (TVD) [m RKB]	3198.0
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	LANGE FM
Geodetic datum	ED50
NS degrees	65° 31' 26.25" N
EW degrees	6° 36' 31.37" E
NS UTM [m]	7269133.48
EW UTM [m]	389463.90
UTM zone	32
NPDID wellbore	8961



Wellbore history

General

Well 6506/5-1 S was drilled to test the Nidhogg prospect on the eastern margin of the Rås Basin in the Norwegian Sea. The primary objective was to determine the presence of hydrocarbons and prove up commercial volumes within the

Late Cretaceous Lysing Formation.

Operations and results

Wildcat well 6506/5-1 S was spudded with the semi-submersible installation Deepsea Nordkapp on 30 January 2020 and drilled to TD at 3225 m (3198.3 m TVD) m in the Early Cretaceous Lange Formation. After TD, the well was plugged back and side-tracked from 2880 m (6506/5-1 S T2) for coring. The side-track was drilled to 3148.5 m (3120.93 m TVD). Operations proceeded without significant problems but due to prolonged waiting on weather, the well duration was 27 days more than planned. The well was drilled with seawater and hi-vis pills down to 521 m, with KCl/GEM/Polymer mud from 521 to 1376.4 m and with Innovert NS oil-based mud from 1376.4 m to TD.

Top Lysing reservoir was confirmed at 3081.2 m (3054.4m TVD RKB), with gas down to the gas-water contact at 3097.3 m (3070.3 m TVD). In the side-track top Lysing reservoir was at 3080.9 m (3053.2 m TVD) at a distance 17.5 m from the main bore. No shows above background OBM were observed in either of the wellbores.

One core was cut in the 6506/5-1 S T1 side-tracked from 3077 to 3147.3 m. A petrophysical log run was performed in the side-track for correlation purposes. RCI fluid samples were taken at 3086.7 m (gas) and 3100.2 m (water). The samples were of good quality with less than 1% contamination.

The well was permanently abandoned on 21 March 2020 as a gas discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1380.00	3225.00

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	3077.0	3147.1	[m]



Total core sample length [m]	70.1
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
441	NORDLAND GP
957	NAUST FM
1425	KAI FM
1685	ROGALAND GP
1685	TARE FM
1805	TANG FM
1883	SHETLAND GP
3081	CROMER KNOLL GP
3081	LYSING FM
3137	LANGE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - ABGR GR RES ECD DI	2860	3077
SGR ECS TA RES NEU DEN	2857	3146

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	515.0	42	521.0	0.00	
SURF.COND.	13 3/8	1368.0	17 1/2	1376.0	1.65	FIT
LINER	9 5/8	2833.0	12 1/4	2833.0	1.77	FIT
OPEN HOLE		3120.0	8 1/2	3120.0	0.00	
OPEN HOLE		3199.0	8 1/2	3199.0	0.00	