

**General information**

Wellbore name	6507/5-9 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Discovery	6507/5-9 S (Shrek)
Well name	6507/5-9
Seismic location	PGU18301-2006-HR / PGU18301-4014-HR
Production licence	838
Drilling operator	PGNiG Upstream Norway AS
Drill permit	1781-L
Drilling facility	DEEPSEA NORDKAPP
Drilling days	29
Entered date	30.08.2019
Completed date	27.09.2019
Plugged date	27.09.2019
Release date	27.09.2021
Publication date	10.11.2021
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	FANGST GP
2nd level with HC, age	EARLY JURASSIC
2nd level with HC, formation	BÅT GP
Kelly bushing elevation [m]	32.5
Water depth [m]	358.0
Total depth (MD) [m RKB]	2317.0
Final vertical depth (TVD) [m RKB]	2293.0
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	BÅT GP
Geodetic datum	ED50
NS degrees	65° 39' 35.84" N
EW degrees	7° 38' 50.85" E
NS UTM [m]	7282861.20



EW UTM [m]	437797.13
UTM zone	32
NPDID wellbore	8866

Wellbore history

Well 6507/5-9 S was entered with the semi-submersible rig Deepsea Nordkapp on 30 August 2019 and drilled to TD at 2317 m (2293 m TVD) in the Early Jurassic Åre Formation. The well was drilled as a deviated S-shaped borehole with an inclination of 17° and 305-azimuth through the reservoir interval. The well was drilled down to 456.5 m with seawater and sweeps, from 456.5 to 1103 m with seawater, hi-vis, and KCl/Glycol water-based mud, and from 1103 m to TD with Innovert oil-based mud.

The primary target, top Garn Formation in the Fangst Group, was penetrated at 2033 m (1988.5 m TVD MSL) and consists of well sorted massive sandstone. The Not Formation was encountered at 2061 m (2015.8 m TVD MSL) and consists of argillaceous and silty sandstone. The Tilje Formation was encountered at 2072.5 m (2026.8 m TVD MSL) and Åre Formation at 2086 m (2039.7 m TVD MSL). The secondary target, Lower Tilje/Åre Formation, was encountered at 2243 m (2190.2 m TVD MSL) where the formations consists of interbedded sandstone, siltstone, and claystone with high content of coal beds representing an Intra Åre coal unit. Well 6507/5-9 S encountered in the reservoir section a 45 m gross gas column and a 39 m thick oil column in an extensive sandstone package with mainly good to very good reservoir quality of Fangst and Båt groups of Jurassic age. The gas-oil contact (GOC) was encountered at 2079 m (2033 m TVD MSL) determined from formation pressure gradient analysis and the oil-water contact (OWC) at 2119.6 (2072 m TVD MSL). However, the neutron-density logs crossover indicated GOC at 2074.9 m (2029.1 m TVD MSL). The reservoir hydrocarbon zone Net/Gross ratio was calculated to be at 78.2%.

Three core runs with a total of 126 m of core was cut through the hydrocarbon bearing rock sequences and into the water wet zone in the primary target. A total of 121.7 m partly unconsolidated and in general weak core material was recovered to surface. MDT pressure survey and fluid sampling were performed. MDT fluid sample were taken at 2038 m (1993.8 m TVD MSL, gas), 2074 m (2028.25 m TVD MSL, gas), 2088.9 m (2042.6 m TVD MSL, oil), 2116.5 m (2069 TVD MSL, oil) and 2121.6 m (2073.83 m TVD MSL, water). The second target interval was not hydrocarbon bearing and co coring was performed. After the discovery, it was decided to drill the 6507/5-9 A sidetrack to verify extension of hydrocarbon bearing reservoir.

The well with its sidetrack was permanently plugged and abandoned on 27 September 2019 as a small discovery with potential for development.

Testing

No drill stem test was performed.

**Cuttings at the Norwegian Offshore Directorate**

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1110.00	2317.00

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	2041.8	2076.9	[m]
2	2077.5	2113.8	[m]
3	2113.8	2163.9	[m]

Total core sample length [m]	121.5
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
392	NORDLAND GP
392	NAUST FM
745	UNDIFFERENTIATED
1325	UNDIFFERENTIATED
1325	NAUST FM
1505	KAI FM
1727	HORDALAND GP
1727	BRYGGE FM
1807	ROGALAND GP
1807	TARE FM
1900	TANG FM
1907	SHETLAND GP
1907	SPRINGAR FM
1912	NISE FM
1972	VIKING GP
1972	SPEKK FM
1977	MELKE FM
2033	FANGST GP
2033	GARN FM



2061	NOT FM
2073	BÅT GP
2073	TILJE FM
2086	ÅRE FM
2243	UNDIFFERENTIATED

Logs

Log type	Log top depth [m]	Log bottom depth [m]
GR CMR MDT	2038	2196
HNGS HGNS HDRS AIT	1989	2317
IBC CBL	1747	2310
LWD - DGR ADR FR LD CTN PWD DIR	1996	2317
LWD - DGR EWR P4 XBAT PWD DIR	456	1103
LWD - DIR	391	456
LWD - GEOT PWD DIR	1103	1996
LWD - GP DGR EWR P4 ALD CTN XBAT	1103	1996
PPC MSIP DOBMI	1989	2317
VSI4	586	2310

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	456.0	36	458.0	0.00	
SURF.COND.	13 3/8	1096.0	17 1/2	1103.0	1.66	LOT
INTERM.	9 5/8	1980.0	12 1/4	1986.0	1.58	FIT
OPEN HOLE		2293.0	8 1/2	2293.0	0.00	