General information

Wellbore name	7122/6-3 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	BARENTS SEA
Discovery	7122/6-3 S (Rødhette)
Well name	7122/6-3
Seismic location	ST17M04 Inline: 2539 Crossline: 4943
Production licence	901
Drilling operator	Vår Energi AS
Drill permit	1869-L
Drilling facility	SCARABEO 8
Drilling days	25
Entered date	16.09.2021
Completed date	10.10.2021
Plugged and abondon date	10.10.2021
Release date	10.10.2023
Publication date	12.09.2023
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	EARLY/MID JURASSIC
1st level with HC, formation	STØ FM
Kelly bushing elevation [m]	34.0
Water depth [m]	427.0
Total depth (MD) [m RKB]	2015.0
Final vertical depth (TVD) [m RKB]	2004.0
Maximum inclination [°]	10.5
Bottom hole temperature [°C]	70
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	FRUHOLMEN FM
Geodetic datum	ED50
NS degrees	71° 31' 34.93'' N
EW degrees	22° 44' 49.03'' E
NS UTM [m]	7937212.61

EW UTM [m]	561778.56
UTM zone	34
NPDID wellbore	9388

Wellbore history

General

Well 7122/6-3 S was drilled to test the R dhette prospect in the Hammerfest Basin in the Barents Sea. The primary objective was to prove minimum commercial oil volumes in the Jurassic age Realgrunnen Subgroup, including determination of HC contacts.

Operations and results

A pilot well 7122/6_U_1was drilled down to 1015 m to confirm competent casing point for the mainbore surface casing.

Wildcat well 7122/6-3 S was spudded with the semi-submersible installation Scarabeo 8 on 16 September 2021 and drilled to TD at 2015 m (2004 m TVD) in the Triassic Fruholmen Formation. The well was drilled vertical down to 1300 m and deviated from there to TD with a sail angle of ca 10 . Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 1002 m and with Glydril mud from 1002 m to TD.

Top of the target Realgrunnen Subgroup, St Formation was found at 1891 m. The St , Nordmela and Tub en formations were hydrocarbon bearing with a wet gas cap over oil. The gas-oil contact was determined at 1909.0 m (1899.7 m TVD) and oil was found down to a FWL at 1919.3 m (1909.8 m TVD). The reservoir quality was fair to good with porosities from 17 to 27% in the cleanest and best water bearing sands in the Fruholmen Formation. There is vertical communication across the St and Fruholmen formations.

Two cores were cut in succession from 1898 to 1927 m in the St , Nordmela, Tub en and Fruholmen formations. Recovery was 92% for core 1 and 100% for core 2. Oil samples were taken at 1911.5 m. Wet gas was sampled at 1899.19 m. Water samples were taken at 1920.8 m and 1939.79 m.

The well was permanently abandoned on 10 October 2021 as an oil and 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]
1010.00	2015.00

Cuttings available for sampling?	YES

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	1898.0	1913.6	[m]
2	1915.0	1927.0	[m]

Total core sample length [m]	27.6
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
461	NORDLAND GP
815	NYGRUNNEN GP
815	KVEITE FM
852	ADVENTDALEN GP
852	KOLMULE FM
1583	KOLJE FM
1767	KNURR FM
1834	HEKKINGEN FM
1891	REALGRUNNEN SUBGP
1891	KAPP TOSCANA GP
1891	STØ FM
1905	NORDMELA FM
1908	TUBÅEN FM
1921	FRUHOLMEN FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - ARC TELE	529	1829
LWD - CORE1	1898	1915
LWD - CORE2	1915	1927
LWD - GVR ARC ROS	1829	1898
LWD - GVR ECO ROS	1927	2015
LWD - TELE	461	529
MDT CMR HNGS JAR	1987	2015
MDT JAR	1920	1899
USIT CBL	1301	1819

XPT MAST HRLT PEX JAR	1796	1995

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.	30	521.0	36	529.0	0.00	
INTERM.	13 3/8	997.0	17 1/2	1005.0	1.49	FIT
INTERM.	9 5/8	1827.0	12 1/4	1832.0	1.70	FIT
OPEN HOLE		2015.0	8 1/2	2015.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1136	1.25	12.0	9.9	KC	
1810	1.30	13.0	9.9	KC	
1829	1.30	13.0	8.4	KC	
1998	1.30	12.0	9.9	KC	
2015	1.30	11.0	10.7	KC	