

**General information**

Wellbore name	7122/7-6
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	BARENTS SEA
Field	GOLIAT
Discovery	7122/7-1 Goliat
Well name	7122/7-6
Seismic location	inline 3229.xline 1802-3MAZ survey EN0901 Az 127
Production licence	229
Drilling operator	Eni Norge AS
Drill permit	1422-L
Drilling facility	SCARABEO 8
Drilling days	76
Entered date	21.10.2012
Completed date	04.01.2013
Release date	04.01.2015
Publication date	13.04.2015
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL/GAS
Discovery wellbore	NO
1st level with HC, age	EARLY TRIASSIC
1st level with HC, formation	FRUHOLMEN FM
2nd level with HC, age	MIDDLE TRIASSIC
2nd level with HC, formation	KOBBE FM
Kelly bushing elevation [m]	34.0
Water depth [m]	380.0
Total depth (MD) [m RKB]	2026.0
Final vertical depth (TVD) [m RKB]	2026.0
Maximum inclination [°]	0.65
Oldest penetrated age	EARLY TRIASSIC
Oldest penetrated formation	KLAPPMYSS FM
Geodetic datum	ED50
NS degrees	71° 16' 11.44" N



EW degrees	22° 19' 20.14" E
NS UTM [m]	7908224.31
EW UTM [m]	547388.20
UTM zone	34
NPDID wellbore	7051

Wellbore history

General

Well 7122/7-6 was drilled as an appraisal well on the Goliat Field in the Barents Sea. The primary objective was to define the Kobbe M0 compartment prior to drilling of the M0 development wells. The well should also reduce the structural uncertainty and give information about the OWC and GOC of the Kobbe Main Compartment. The secondary objectives were to test the hydrocarbon potential of the Realgrunnen Subgroup and the Snadd Formation.

Operations and results

A 9 7/8" pilot hole was spudded 50 m away from the main well location and drilled to 680 m. No shallow gas or water flow was observed and the pilot was plugged back to seabed. Appraisal well 7122/7-6 was spudded with the semi-submersible installation Scarabeo 8 on 21 October 2012 and drilled to TD at 2026 m in the Early Triassic Klappmyss Formation. The well was drilled with seawater and hi-vis pills down to 562 m and with Glydril/KCl mud from 562 m to TD.

Top Fruholmen was penetrated at 1121 m and was oil bearing from top to the OWC at 1162 m. Analysis of the mud gas while drilling ("Gas While Drilling") show high iC4/n/C4 ratio in the Fruholmen oil due to biodegradation. The Snadd Formation was mainly claystone/siltstone with thin interbedded sandstones. It was water bearing without shows. The Kobbe Formation was encountered at 1754 m and had gas down to the GOC at 1792 m and oil down to the OWC at 1846 m. Diminishing oil shows on SWC's were described below the Kobbe OWC down to 1900 m.

Four cores were cut. Cores 1 and 2 were cut from 1126 to 1163 m in the Fruholmen reservoir. Cores 3 and 4 were cut from 1759 to 1766 m in the Kobbe reservoir. Core recovery was between 90 and 100%. MDT-XPT pressure points were acquired in the Fruholmen and Kobbe reservoirs to establish the fluid gradients and contacts. MDT fluid samples were taken in the Fruholmen Formation at 1152 m (oil), 1173 m (water), and in the Kobbe Formation at 1757 m (gas), 1842.5 m (oil), and 1866 m (water).

The well was permanently abandoned on 4 January 2013 as an oil and gas appraisal well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
570.00	2026.40



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	1126.0	1156.0	[m]
2	1156.0	1162.8	[m]
3	1759.0	1760.0	[m]
4	1760.0	1765.3	[m]
5	1803.0	1824.7	[m]

Total core sample length [m]	64.9
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
414	NORDLAND GP
478	SOTBAKKEN GP
478	TORSK FM
624	NYGRUNNEN GP
624	KVITING FM
645	ADVENTDALEN GP
645	KOLMULE FM
980	KNURR FM
1046	HEKKINGEN FM
1110	FUGLEN FM
1122	KAPP TOSCANA GP
1122	FRUHOLMEN FM
1208	SNADD FM
1754	SASSENDALLEN GP
1754	KOBBE FM
1996	KLAPPMYSS FM

Logs



Log type	Log top depth [m]	Log bottom depth [m]
CMR XPT GR	1090	1275
CMR XPT GR	1720	2023
FMI SON	1090	1660
FMI SON GR	1651	2027
MDT	1152	1152
MDT	1173	1173
MDT GR	1757	1848
MDT GR	1842	1842
MSCT GR	1993	1748
MWD - GR CAL ECD RES DEN NEU SON	1825	2026
MWD - GR RES ECD	471	562
MWD - GR RES ECD	1660	1803
MWD - GR RES NBGR ECD	1098	1126
MWD - GR RES NBGR ECD DEN SON NE	1126	1651
MWD - GR RES NBGR ECD SON	562	1098
TLD HRLA HNGS	0	0
TLD HRLA HNGS EDTC LEHQT	1090	1275
USIT GR	414	1651
VSP GR	382	2000

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	462.0	42	471.0	0.00	
SURF.COND.	20	550.0	24	562.0	1.35	FIT
PILOT HOLE		681.0		681.0	0.00	
INTERM.	13 3/8	1090.0	16	1098.0	1.40	FIT
LINER	9 5/8	1660.0	12 1/4	1660.0	0.00	
OPEN HOLE		2026.0	8 1/2	2026.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
424	1.32			KC	



471	1.03			GE	
601	1.20			KC	
850	1.34			KC	
1098	1.20			KC	
1759	1.24			KC	
2026	1.25			KC	

Pressure plots

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

Document name	Document format	Document size [MB]
7051 Formation pressure (Formasjonstrykk)	PDF	0.26

