

General information

Wellbore name	7324/8-3
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	BARENTS SEA
Discovery	7324/8-1 (Wisting)
Well name	7324/8-3
Seismic location	
Production licence	537
Drilling operator	OMV (Norge) AS
Drill permit	1668-L
Drilling facility	ISLAND INNOVATOR
Drilling days	33
Entered date	16.08.2017
Completed date	17.09.2017
Release date	17.09.2019
Publication date	17.09.2019
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	STØ FM
2nd level with HC, age	LATE TRIASSIC
2nd level with HC, formation	FRUHOLMEN FM
Kelly bushing elevation [m]	30.0
Water depth [m]	396.0
Total depth (MD) [m RKB]	805.0
Final vertical depth (TVD) [m RKB]	805.0
Maximum inclination [°]	1.1
Bottom hole temperature [°C]	20
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	FRUHOLMEN FM
Geodetic datum	ED50
NS degrees	73° 26' 4" N
EW degrees	24° 23' 21.67" E

NS UTM [m]	8150984.02
EW UTM [m]	416938.84
UTM zone	35
NPDID wellbore	8239

Wellbore history

General

The 7324/8-3, Wisting Central III, is an appraisal well in the Hoop area of the Barents Sea. The objectives of the well were to perform XLOT in the Fuglen Formation overburden and in the Stø Formation reservoir followed by an injectivity test in the Stø Formation. In addition, there was planned a core from the Fuglen Formation overburden, including the transition zone into Stø Formation, to the bottom of the reservoir in the Fruholmen Formation. Oil and water samples were to be recovered and logs run from the 30" shoe to TD.

Operations and results

Appraisal well 7324/8-3 was spudded with the semi-submersible installation Island Innovator on 16 August 2017 and drilled to TD at 805 m in the Late Triassic Fruholmen Formation. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis sweeps down to 492 m and with Glydriil water-based mud from 492 m to TD.

After having drilled the main bore, a pilot hole was drilled to 526.0 m. The purpose of the pilot hole was to obtain sonic data from the top hole section for seismic calibration.

The Fuglen Formation was penetrated at 626 m and is 39 m thick in the well. Top Wisting reservoir was encountered at 665 m. The reservoir consists of 19 m Stø sandstone, 4 m Nordmela sandstone and 72 m of intercalated claystones and sandstones in the upper Reke Member of the Fruholmen Formation. The reservoir is oil-bearing down to the OWC at 722.2 m.

Three cores were cut from 650m in the Fuglen Formation down to 766 m in the Akkar Member of the Fruholmen Formation, including the transition zone between Fuglen and Stø formations. The addition of Tritium tracer in the mud during coring of the reservoir aided in the water sample contamination analysis. MDT fluid samples were taken at 671.0 m (oil), 700.7 m (oil), and 740.4 m (water).

The well was permanently abandoned on 17 September 2017 as an oil appraisal well.

Testing

Extended leak-off tests (XLOT) were carried out in the Fuglen, Stø and Fruholmen formations. A water injection test was performed in the Stø Formation through perforations at 678.5 - 681.5 m.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
459.00	805.00

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	650.0	674.8	[m]
2	674.9	706.0	[m]
3	706.0	761.6	[m]

Total core sample length [m]	111.5
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
426	NORDLAND GP
501	ADVENTDALEN GP
501	KOLMULE FM
567	KOLJE FM
587	KLIPPFISK FM
596	HEKKINGEN FM
626	FUGLEN FM
665	KAPP TOSCANA GP
665	STØ FM
688	FRUHOLMEN FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR MDT GR	628	799
FMI MSIP GR	662	800
HRLA PEX APS HNGS GR	600	800
LWD - GVR ARC TELE	645	805
LWD - GVR ARC TELE SONS	497	645
LWD - GVR ECO SONI TELE	426	526
MDT GR	671	740
MWD - TELE	414	493

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	492.6	36	492.6	0.00	
PILOT HOLE		526.0	9 7/8	526.0	0.00	
INTERM.	9 5/8	636.6	12 1/4	645.0	1.15	LOT
		673.5		0.0	1.18	LOT
		702.0		0.0	2.74	LOT
LINER	7	805.0	8 1/2	805.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
426	1.04			Hi-vis	
426	1.02			SW	
426	1.49			KCl kill mud	
497	1.59	19.0		Glydril	
645	1.12	11.0		Glydril	
645	1.59	20.0		Glydril	
649	1.14	14.0		Glydril	
805	1.11	1.0		NaCl Brine	
805	1.17	12.0		Glydril	
805	1.02			SW	