



Generell informasjon

Brønnbane navn	7219/12-1 A
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	BARENTS SEA
Funn	7219/12-1 (Filicudi)
Brønn navn	7219/12-1
Seismisk lokalisering	WG0901: Inline 986 crossline 3779
Utvinningstillatelse	533
Boreoperatør	Lundin Norway AS
Boretillatelse	1650-L
Boreinnretning	LEIV EIRIKSSON
Boredager	41
Borestart	19.01.2017
Boreslutt	28.02.2017
Plugget dato	28.02.2017
Plugget og forlatt dato	29.01.2018
Frigitt dato	28.02.2019
Publiseringsdato	04.04.2019
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	EARLY JURASSIC
1. nivå med hydrokarboner, formasjon.	TUBÅEN FM
2. nivå med hydrokarboner, alder	EARLY JURASSIC
2. nivå med hydrokarboner, formasjon	NORDMELA FM
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	322.0
Totalt målt dybde (MD) [m RKB]	2026.0
Totalt vertikalt dybde (TVD) [m RKB]	1825.0
Maks inklinasjon [°]	45.2



Temperatur ved bunn av brønnbanen [°C]	61
Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	FRUHOLMEN FM
Geodetisk datum	ED50
NS grader	72° 12' 44.21" N
ØV grader	19° 46' 38.32" E
NS UTM [m]	8019294.63
ØV UTM [m]	662747.70
UTM sone	33
NPDID for brønnbanen	8105

Brønnhistorie



General

Well 7219/12-1 A is an appraisal of the 7219/12-1 Filicudi oil and gas discovery in Late Triassic sandstones of the Tubåen Formation. The objective of the appraisal was to test the hydrocarbon potential and reservoir properties of the Early Jurassic Nordmela Formation and the Upper Triassic Tubåen Formation in the fault block to the East of the main Filicudi prospect. The appraisal should confirm pressure communication and similar hydrocarbon types and contacts as in the main wellbore.

Operations and results

Appraisal well 7219/12-1 A kicked off at 670 m from main wellbore 7119/12-1 on 19 January 2017. It was drilled with the semi-submersible installation Leiv Eriksson to TD at 2026 m (1825 m TVD) m in the Late Triassic Fruholmen Formation. Operations proceeded without significant problems. The well was drilled with Performadril water-based mud (3.2 – 3.6 % glycol) from kick-off to TD.

Top target reservoir, Early Jurassic Nordmela Formation sandstone, was encountered at 1699 m (1516.3 m TVD), overlying Late Triassic to Early Jurassic sandstone of the Tubåen Formation. The sandstones were gas and oil bearing with GOC at 1756.5 m (1568.5 m TVD) and the OWC between 1818 m to 1823.5 m (1624.5 m to 1630 m TVD). Two gas gradients were seen, the upper interval, above ca 1735 m is 2 bar less than the lower interval. The oil is heavy, with stock tank density 0.956 to 0.959 g/cm³.

Weak shows were seen in 2 SWCs in claystones at 1682 m and 1688.4 m above the reservoir. Below the reservoir cuttings had shows down to 1871 m (direct and cut fluorescence), while SWC's had oil shows down to 1910 m. The SWC shows down to 1850 were described as weak hydrocarbon odour, 30% bleeding dark brown staining, 50% patchy, moderately, orange direct fluorescence, moderately, streaming to blooming, moderate bluish white cut fluorescence, good, 90% bluish white fluorescence residue, 5% - 30% pale yellow residue. Below 1850 weaker shows without odour or stain were described.

Three cores were cut in succession from 1699 m to 1815 m with close to 100% total recovery. MDT fluid samples were taken at 1712.29 m (Gas), 1729.91 m (gas), 1751.46 m (gas), 1751.5 m (gas), 1767.2 m (oil), 1790.8 m (oil), 1796.6 m (oil), 1812.0 m (oil), 1817.2 m (water), 1817.5 m (water), 1827.2 m (water), and 1878.0 m (water).

The well was temporary abandoned on 28 February as an oil and gas appraisal.

Testing

The testing equipment on the rig was not capable of handling the heavy oil found in the well. Therefore, no DST was carried out. The well was temporary abandoned for possible testing at a later stage.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
670.00	2027.00

Borekaks tilgjengelig for prøvetaking?	YES
--	-----



Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1699.0	1723.4	[m]
2	1724.0	1760.6	[m]
3	1760.6	1814.8	[m]

Total kjerneprøve lengde [m]	115.1
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
347	NORDLAND GP
485	SOTBAKKEN GP
485	TORSK FM
1673	ADVENTDALEN GP
1673	KOLJE FM
1699	KAPP TOSCANA GP
1699	NORDMELA FM
1747	TUBÅEN FM
1907	FRUHOLMEN FM
1907	KRABBE MBR
2015	REKE MBR

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
FMI MSIP GR JAR	347	2027
HRLA PEX HNGS GR JAR	1632	2027
MDT	1712	1751
MDT	1796	1817
MSCT	1695	2000
MWD	1764	1887
MWD - NBINC RES PWD GR DIR	643	1632
MWD - PWD RES GR DIR DEN CAL N A	1552	2026
XL ROCK	1650	1740



XPT CMR ECS GR JAR	1660	1900
--------------------	------	------

Foringsrør og formasjonsstyrketester

Type utforing	Utforing diam. [tommer]	Utforing dybde [m]	Brønnbane diam. [tommer]	Brønnbane dyp [m]	LOT/FIT slam eqv. [g/cm3]	Type formasjonstest
CONDUCTOR	30	414.9	36	414.9	0.00	
SURF.COND.	20	654.5	26	662.0	1.36	LOT
PILOT HOLE		662.0	9 7/8	662.0	0.00	
INTERM.	9 5/8	1632.8	12 1/4	1640.0	1.40	FIT
LINER	7	2024.8	8 1/2	2026.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
460	1.03	1.0		SW	
560	1.22	16.0		KCL/Gem/Polymer	
635	1.15	13.0		Performadril	
635	1.16	12.0		Performadril	
659	1.20	14.0		Performadril	
1237	1.15	11.0		Performadril	
1336	1.20	22.0		Performadril	
1342	1.21	16.0		KCL/Gem/Polymer	
1680	1.20	23.0		Performadril	
1722	1.22	25.0		Performadril	
1724	1.21	27.0		Performadril	
1760	1.20	26.0		Performadril	
2026	1.21	15.0		KCL/Gem/Polymer	
2026	1.20	26.0		Performadril	