



Generell informasjon

Brønnbane navn	7220/11-3 A
Type	EXPLORATION
Formål	APPRAISAL
Status	SUSPENDED
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	BARENTS SEA
Funn	7220/11-1 (Alta)
Brønn navn	7220/11-3
Seismisk lokalisering	LN12M01 inline 29006 xline 24350
Utvinningstillatelse	609
Boreoperatør	Lundin Norway AS
Boretillatelse	1598-L
Boreinnretning	ISLAND INNOVATOR
Boredager	27
Borestart	02.09.2015
Boreslutt	29.09.2015
Frigitt dato	29.09.2017
Publiseringsdato	29.09.2017
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	LATE TRIASSIC
1. nivå med hydrokarboner, formasjon.	KLAPPMYSS FM
2. nivå med hydrokarboner, alder	EARLY TRIASSIC
2. nivå med hydrokarboner, formasjon	NO FORMAL NAME
Avstand, boredekk - midlere havflate [m]	30.0
Vanndybde ved midlere havflate [m]	397.0
Totalt målt dybde (MD) [m RKB]	2135.0
Totalt vertikalt dybde (TVD) [m RKB]	1992.0
Maks inklinasjon [°]	41.3
Eldste penetrerte alder	PERMIAN
Eldste penetrerte formasjon	ØRN FM
Geodetisk datum	ED50



NS grader	72° 1' 12.62" N
ØV grader	20° 31' 41.23" E
NS UTM [m]	8000137.25
ØV UTM [m]	690231.43
UTM sone	33
NPDID for brønnbanen	7786

Brønnhistorie

General

Well 7220/11-3 A is a geological sidetrack to well 7220/11-3, which confirmed oil and gas in Triassic conglomerates and Permian carbonates in a central position on the Alta discovery. The Alta structure lie on the southern Loppa High in the Barents Sea. Well 7220/11-3 did not penetrated to the oil-water contact. The primary objective of the sidetrack was to prove the presence and thickness of the Early Triassic conglomerates ca 400 m to the east of the main wellbore and to confirm hydrocarbon columns and fluid contacts similar to those established in the 7220/11-1 discovery well.

Operations and results

Appraisal well 7220/11-3 A was kicked off from 1105 m in the 7220/11-3 main bore on 2 September 2015. It was drilled with the semi-submersible installation Island Innovator to 1240 m where it was aborted due to steering problems. The wellbore was plugged back and successfully sidetracked. It was drilled with no significant further issues to a total depth of 2135 m (1991.8 m TVD) in Permian carbonates of the Ørn Formation. The well was drilled with AquaDrill mud from kick-off to TD.

The geological sidetrack proved a total hydrocarbon column height of 74 m comprising 30 m of gas over 44 m of oil. The column extended from 2013 m (1880 m TVD) in the upper Klappmyss Formation down to a free-water level estimated to be at 2094 m (1954 m TVD) in Early Triassic conglomerates. The gas-oil contact was established at 2046 m (1910 m TVD). The pressures and gradients were found to be comparable with those established in the 7220/11-3 main well and in the 7220/11-1 discovery well. Numerous oil shows were described in siltstones and sandstones below 1100 m in the Snadd and Kobbe formations. Shows were described also below the hydrocarbon-bearing reservoir all through down to TD.

Two cores were cut from 2015.0 to 2094.5 m with 100% recovery. MDT fluid samples were taken at 2121.2 m (water), 2064 m (oil), and 2013.4 m (gas).

Due to concerns of possible severe losses occurring while the reservoir was exposed, drilling was terminated prior to penetrating the lowermost Ørn Formation carbonates, which were believed to pose the highest risk of losses. The wellbore was suspended on 29 September 2015 after installing a 7" liner. Further drilling and testing would be done in a later re-entry. The well is classified as an oil and gas appraisal well.

Testing

No drill stem test was performed.

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Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1110.00	1240.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2015.0	2070.4	[m]
2	2070.3	2094.5	[m]

Total kjerneprøve lengde [m]	79.6
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
427	NORDLAND GP
427	UNDIFFERENTIATED
492	SOTBAKKEN GP
492	TORSK FM
575	ADVENTDALEN GP
575	KOLMULE FM
601	KAPP TOSCANA GP
601	SNADD FM
1982	SASSENDALEN GP
1982	KOBBE FM
2013	KLAPPMYSS FM
2064	UNDEFINED GP
2120	GIPSDALEN GP
2120	UNDIFFERENTIATED
2129	ØRN FM

Logger



Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MWD - ATK GR RES PWD DIR AC	1077	1141
MWD - RES GR PWD DIR AC	1141	1240

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	493.6	36	494.0	0.00	
SURF.COND.	20	590.1	26	598.0	1.41	LOT
PILOT HOLE		598.0	9 7/8	598.0	0.00	
INTERM.	13 3/8	1077.0	17 1/2	1085.0	1.40	LOT
INTERM.	9 5/8	1904.7	12 1/4	1913.0	1.45	LOT
LINER	7	2133.5	8 1/2	2135.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1124	1.20	12.0		Water Based	
1209	1.20	16.0		Water Based	
1301	1.20	14.0		Water Based	
1519	1.20	14.0		Water Based	
1702	1.21	15.0		Water Based	
1913	1.15	8.0		Water Based	
1913	1.21	14.0		Water Based	
2025	1.16	11.0		Water Based	
2135	1.13	1.0		Water Based	
2135	1.14	11.0		Water Based	