Generell informasjon

Brønnbane navn	7220/6-2 R
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	BARENTS SEA
Funn	7220/6-2 R (Neiden)
Brønn navn	7220/6-2
Seismisk lokalisering	LN11M04 inline 7758 & crossline 3828
Utvinningstillatelse	609
Boreoperatør	Lundin Norway AS
Boretillatelse	1590-L2
Boreinnretning	LEIV EIRIKSSON
Boredager	31
Borestart	23.10.2016
Boreslutt	22.11.2016
Plugget og forlatt dato	22.11.2016
Frigitt dato	22.11.2018
Publiseringsdato	22.11.2018
Opprinnelig formål	WILDCAT
Gjenåpnet	YES
Årsak til gjenåpning	DRILLING/TESTING/PLUGGING
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	PERMIAN
1. nivå med hydrokarboner, formasjon.	ØRN FM
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	387.0
Totalt målt dybde (MD) [m RKB]	1318.0
Totalt vertikalt dybde (TVD) [m RKB]	1318.0
Eldste penetrerte formasjon	BASEMENT
Geodetisk datum	ED50
NS grader	72° 34' 13.1'' N
ØV grader	20° 58' 19.66'' E
NS UTM [m]	8062692.32

ØV UTM [m]	699378.62
UTM sone	33
NPDID for brønnbanen	8026

Brønnhistorie

Wellbore history

General

Well 7220/6-2 and its re-entry 7220/6-2 R were drilled to test the Neiden prospect on the western side of the Loppa High in the Barents Sea. The well location is ca 4 km north-northwest of the Obelix well 7220/6-1, which had shows and traces of live oil in the Permian Ørn Formation. The primary objectives were to test the reservoir properties and hydrocarbon potential in sandstones within the Triassic Snadd Formation and in the carbonates of the Ørn Formation. Wellbore 7220/6-2 was drilled with Island Innovator and was suspended in the Triassic Snadd Formation on 4 November 2015 due to rig classification in the Barents Sea for the prevailing winter. The re-entry 7220/6-2 R was drilled to test the Permian target not reached by 7220/6-2.

Operations and results

Well 7220/6-2 was re-entered on 23 October 2016. Well 7220/6-2 R was drilled with the semi-submersible installation Leiv Eiriksson to TD at 1318 m, 99 m into metamorphic basement rock. Operations proceeded without significant problems. The well was drilled with KCl/Polymer/GEM water based mud all through.

Snadd claystones were found to rest directly upon carbonates of the Permian Ørn Formation. The Ørn Formation was encountered in the 7220/6-2 R at 1059.5 m. The formation had a gross thickness of 168.9 m of carbonates, and was mainly composed of dolomites, dolomitic limestones, dolomitic conglomerates and cherts. The Ørn Formation yielded both gas and oil and contained a gross 31 m hydrocarbon column. The Gas-Oil contact is indicated to be in the interval 1067 to 1077 m. An Oil-Water contact was identified at 1091 m. Oil shows (spotty direct and cut fluorescence, but no odour) continued below the OWC and down to top basement at 1270 m

A total of 43.8 m core was cut in seven cores in the intervals 1050 to 1053.3 m and 1062 to 1102.5. Total recovery for all seven cores was 96.9%. MDT fluid samples were taken at 1066 m (gas), 1074.4 m (oil), 1078.7 m (oil), 1091 m (oil), 1096 m (water) and 1119.5 m (water).

The well was permanently abandoned on 22 November 2016 as an oil and gas discovery.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
983.00	1317.00

Borekaks tilgjengelig for prøvetaking?	YES

Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1050.0	1052.8	[m]
2	1062.0	1070.3	[m]
3	1070.7	1073.4	[m]
4	1073.4	1085.5	[m]
5	1085.6	1097.4	[m]
6	1097.4	1099.8	[m]
7	1099.9	1102.5	[m]

Total kjerneprøve lengde [m]	42.7
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Top depth [mMD RKB]	Lithostrat. unit
412	NORDLAND GP
412	UNDIFFERENTIATED
481	SOTBAKKEN GP
481	TORSK FM
510	KAPP TOSCANA GP
510	SNADD FM
1060	GIPSDALEN GP
1060	ØRN FM
1229	FALK FM
1270	BASEMENT

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CMR NEXT UBI XPT	931	1315

FMI MSIP	931	1316
MDT	1066	1119
MSCT	1044	1300
MWD - GR PWD RES ST DEN CAL NEU	979	1317
PEX HRLA ADT	830	1319
VSP	335	1310

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	478.0	36	478.0	0.00	
SURF.COND.	13 3/8	494.8	20	497.0	1.26	FIT
PILOT HOLE		497.0	9 7/8	497.0	0.00	
LINER	9 5/8	605.2	12 1/4	606.0	1.44	FIT
LINER	7	978.0	8 1/2	979.0	1.40	FIT
OPEN HOLE		1317.8	6	1317.8	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
430	1.15	16.0		KCL/Gem	
498	1.14	16.0		KCL/Gem	
734	1.14	13.0		KCL/Gem	
1055	1.15	19.0		KCL/Gem	
1105	1.14	16.0		KCL/Gem	
1105	1.16	14.0		KCL/Gem	
1207	1.14	17.0		KCL/Gem	
1323	1.14	22.0		KCL/Gem	