



Generell informasjon

Brønnbane navn	7220/11-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	BARENTS SEA
Funn	7220/11-1 (Alta)
Brønn navn	7220/11-1
Seismisk lokalisering	LN12M01.inline:28954 & crossline :24682
Utvinningstillatelse	609
Boreoperatør	Lundin Norway AS
Boretillatelse	1527-L
Boreinnretning	ISLAND INNOVATOR
Boredager	74
Borestart	05.08.2014
Boreslutt	17.10.2014
Frigitt dato	17.10.2016
Publiseringsdato	19.10.2016
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	TRIASSIC
1. nivå med hydrokarboner, formasjon.	UNDEFINED GP
2. nivå med hydrokarboner, alder	CARBONIFEROUS
2. nivå med hydrokarboner, formasjon	FALK FM
Avstand, boredekk - midlere havflate [m]	30.0
Vanndybde ved midlere havflate [m]	388.0
Totalt målt dybde (MD) [m RKB]	2251.0
Totalt vertikalt dybde (TVD) [m RKB]	2251.0
Maks inklinasjon [°]	3.2
Temperatur ved bunn av brønnbanen [°C]	83
Eldste penetrerte alder	LATE CARBONIFEROUS



Eldste penetrerte formasjon	UGLE FM
Geodetisk datum	ED50
NS grader	72° 3' 26.82" N
ØV grader	20° 32' 45.67" E
NS UTM [m]	8004336.37
ØV UTM [m]	690463.21
UTM sone	33
NPDID for brønnbanen	7503

Brønnhistorie

**General**

Well 7220/11-1 was drilled on the Alta prospect on the southern part of the Loppa High in the Barents Sea. The primary objective was to test sandstones of the Triassic Kobbe Formation and Permian to Carboniferous carbonates of the Ørn Formation. The secondary objective was to test carbonates and sandstones of the Carboniferous Falk Formation.

Operations and results

Wildcat well 7220/11-1 was spudded with the semi-submersible installation Island Innovator on 5th August 2014 and drilled to TD at 2251 m in the Late Carboniferous Ugle Formation. No significant problem was encountered in the operations. The well was drilled with seawater down to 588.4 m and with Aqua-Drill mud from 588.4 m to TD.

Numerous shows, of variable quality, was described in thin sandstones in the upper part of the Triassic Snadd Formation (624 m, 727 - 737 m, 822 m, 845 - 9924 m, 1246 m, 1280 m, 1298 m, and 1329 - 1349 m). The well did not encounter reservoir quality in the primary Alta Kobbe Formation target. A 26 m thick Triassic conglomerate unit was encountered at 1897 m. This unit rests directly on carbonates of the Carboniferous Falk Formation. The Ørn Formation was not present in the well. The Triassic conglomerates and the Falk carbonates were found to be hydrocarbon bearing with a total column height of 57 m (11 m gas column over a 46 m oil leg). The gas/oil contact is interpreted to be at 1908.1 m. Organic geochemical analyses of the oil show an abundance of tricyclic terpanes combined with a light carbon isotopic composition, typical of the Barents region Triassic source rocks. The oil/water contact is interpreted to be at 1954 m. Below the Falk Formation the Ugle Formation had 122 m gross sandstones. These sandstones were described as clear translucent, occasionally yellowish-orange quartz (common moderate brown coating) with moderate brown to reddish brown argillaceous matrix. The grain size is mostly fine to medium, but up to coarse.

The reservoir section was cored in four cores from 1904 m to 1977.5 m with 99 to 100% recovery. MDT fluid samples were taken at 1900.7 m (condensate), 1912.0 m (oil), 1919.5 m (oil), 1939.7 m (oil), 1986.8 m (water), and 1999.5 m (water).

The well was permanently abandoned on 17 October 2014 as an oil and gas discovery.

Testing

The well was perforated in two separate intervals in the Falk Formation (1934.8-1945.0 m) and the Triassic Conglomerates (1912.9-1921.4 m). While flowing from the lower perforations alone before acid stimulation, well productivity was low. After acid stimulation of the lower zone and perforation of the upper zone, a good productivity was achieved. The final flow rate was 520 Sm³/day oil and 48 600 Sm³/day gas through a 36/64 inch fixed choke; the GOR was 94 Sm³/Sm³, and the downhole temperature was 72.7 °C at 1935 m.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
600.00	2250.00

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



Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1904.0	1928.0	[m]
2	1928.0	1954.2	[m]
3	1954.3	1964.0	[m]
4	1964.0	1977.5	[m]

Total kjerneprøve lengde [m]	73.4
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
610.0	[m]	DC	ROBERTSO
640.0	[m]	DC	ROBERT
660.0	[m]	DC	ROBERT
680.0	[m]	DC	ROBERT
700.0	[m]	DC	ROBERT
720.0	[m]	DC	ROBERT
740.0	[m]	DC	ROBERT
760.0	[m]	DC	ROBERT
780.0	[m]	DC	ROBERT
800.0	[m]	DC	ROBERT
820.0	[m]	DC	ROBERT
830.0	[m]	DC	ROBERT
840.0	[m]	DC	ROBERT
850.0	[m]	DC	ROBERT
860.0	[m]	DC	ROBERT
870.0	[m]	DC	ROBERT
900.0	[m]	DC	ROBERT
920.0	[m]	DC	ROBERT
940.0	[m]	DC	ROBERT
960.0	[m]	DC	ROBERT
980.0	[m]	DC	ROBERT
1000.0	[m]	DC	ROBERT
1020.0	[m]	DC	ROBERT
1040.0	[m]	DC	ROBERT
1060.0	[m]	DC	ROBERT



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 2.6.2024 - 11:48

1080.0	[m]	DC	ROBERT
1100.0	[m]	DC	ROBERT
1120.0	[m]	DC	ROBERT
1140.0	[m]	DC	ROBERT
1160.0	[m]	DC	ROBERT
1180.0	[m]	DC	ROBERT
1202.0	[m]	DC	ROBERT
1220.0	[m]	DC	ROBERT
1240.0	[m]	DC	ROBERT
1260.0	[m]	DC	ROBERT
1280.0	[m]	DC	ROBERT
1300.0	[m]	DC	ROBERT
1320.0	[m]	DC	ROBERT
1340.0	[m]	DC	ROBERT
1360.0	[m]	DC	ROBERT
1380.0	[m]	DC	ROBERT
1400.0	[m]	DC	ROBERT
1420.0	[m]	DC	ROBERT
1440.0	[m]	DC	ROBERT
1460.0	[m]	DC	ROBERT
1480.0	[m]	DC	ROBERT
1500.0	[m]	DC	ROBERT
1520.0	[m]	DC	ROBERT
1540.0	[m]	DC	ROBERT
1560.0	[m]	DC	ROBERT
1580.0	[m]	DC	ROBERT
1600.0	[m]	DC	ROBERT
1620.0	[m]	DC	ROBERT
1640.0	[m]	DC	ROBERT
1660.0	[m]	DC	ROBERT
1680.0	[m]	DC	ROBERT
1700.0	[m]	DC	ROBERT
1720.0	[m]	DC	ROBERT
1740.0	[m]	DC	ROBERT
1760.0	[m]	DC	ROBERT
1782.0	[m]	DC	ROBERT
1800.0	[m]	DC	ROBERT
1818.0	[m]	DC	ROBERT
1836.0	[m]	DC	ROBERT
1851.1	[m]	SWC	ROBERT



1854.0 [m]	DC	ROBERT
1859.9 [m]	SWC	ROBERT
1863.0 [m]	DC	ROBERT
1863.2 [m]	SWC	ROBERT
1872.0 [m]	DC	ROBERT
1873.0 [m]	SWC	ROBERT
1881.0 [m]	DC	ROBERT
1890.0 [m]	DC	ROBERT
1895.6 [m]	SWC	ROBERT
1896.5 [m]	SWC	ROBERT
1899.0 [m]	DC	ROBERT
1902.0 [m]	DC	ROBERT
1904.2 [m]	C	ROBERT
1905.5 [m]	C	ROBERT
1906.6 [m]	C	ROBERT
1908.8 [m]	C	ROBERT
1909.6 [m]	C	ROBERT
1910.3 [m]	C	ROBERT
1911.3 [m]	C	ROBERT
1912.7 [m]	C	ROBERT
1913.6 [m]	C	ROBERT
1914.5 [m]	C	ROBERT
1915.4 [m]	C	ROBERT
1916.0 [m]	C	ROBERT
1917.9 [m]	C	ROBERT
1918.5 [m]	C	ROBERT
1919.2 [m]	C	ROBERT
1919.4 [m]	C	APT
1919.9 [m]	C	APT
1920.5 [m]	C	APT
1921.3 [m]	C	ROBERT
1922.2 [m]	C	ROBERT
1922.7 [m]	C	APT
1923.3 [m]	C	ROBERT
1924.2 [m]	C	ROBERT
1924.7 [m]	C	APT
1925.3 [m]	C	ROBERT
1925.7 [m]	C	ROBERT
1926.5 [m]	C	ROBERT
1927.5 [m]	C	ROBERT



1928.8	[m]	C	ROBERT
1929.1	[m]	C	ROBERT
1930.3	[m]	C	ROBERT
1931.2	[m]	C	ROBERT
1931.5	[m]	C	ROBERT
1935.4	[m]	C	ROBERT
1939.6	[m]	C	ROBERT
1940.2	[m]	C	ROBERT
1949.3	[m]	C	ROBERT
1951.3	[m]	C	ROBERT
1956.5	[m]	C	ROBERT
1957.1	[m]	C	ROBERT
1964.5	[m]	C	ROBERT
1968.4	[m]	C	ROBERT
1971.6	[m]	C	ROBERT
1975.2	[m]	C	ROBERT
1976.6	[m]	C	ROBERT
1980.0	[m]	DC	ROBERT
1998.0	[m]	DC	ROBERT
2016.0	[m]	DC	ROBERT
2022.0	[m]	DC	ROBERT
2031.0	[m]	DC	ROBERT
2058.0	[m]	DC	ROBERT
2073.0	[m]	DC	ROBERT
2091.0	[m]	DC	ROBERT
2112.0	[m]	DC	ROBERT

Oljeprøver i Sokkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST	1A	1946.50	1937.00	OIL	02.10.2014 - 00:00	YES
DST	1B	1921.00	1913.00	OIL	05.10.2014 - 00:00	YES

Litostratigrafi



Topp Dyb [mMD RKB]	Litostrat. enhet
418	NORDLAND GP
418	UNDIFFERENTIATED
447	SOTBAKKEN GP
447	TORSK FM
556	ADVENTDALEN GP
556	KOLMULE FM
580	KAPP TOSCANA GP
580	SNADD FM
1852	SASSENDALEN GP
1852	KOBBE FM
1895	KLAPPMYSS FM
1898	UNDEFINED GP
1898	UNDIFFERENTIATED
1923	GIPSDALEN GP
1923	FALK FM
2118	UGLE FM

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	1935	1945	14.3
2.0	1913	1921	14.3

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstempera tur [°C]
1.0				42
2.0				46

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyingde rel. luft	GOR [m3/m3]
1.0	518	49000			95
2.0	530	48000			90

Logger



Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CCL GR SBT VDL	1337	1754
GR GEOW	753	2238
MRCH JAR GR PCOR	1777	2219
MRCH JAR TTRM DSL CN ZDL ORIT XM	1752	2214
MRCH JAR TTRM DSL FLEX MREX	1869	2011
MRCH JAR TTRM DSL FLEX MREX	1890	2108
MRCH JAR TTRM DSL STAR ORIT UXPL	1196	1753
MRCH JAR TTRM DSL STAR ORIT UXPL	1762	2239
MRCH JAR TTRM RLVP RCX GR	1328	1340
MWD - ATK MXT OTK SDTK CCN ORD Z	1082	1770
MWD - MXT OTK SDTK ZTK BCPM NBG	537	1202
MWD - OTK BCPM	418	489
MWD - OTK SDTK BCPM	462	592
MWD - OTK SDTK CCN ORD BCPM II	1694	2249
SC PO SAT PQ IFA MS PC ADT GR	1880	2210

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	486.0	36	489.5	0.00	
SURF.COND.	20	588.4	26	594.0	1.34	FIT
PILOT HOLE		594.0	9 7/8	594.0	0.00	
INTERM.	13 3/8	1196.0	17 1/2	1202.0	1.50	FIT
INTERM.	9 5/8	1764.1	12 1/4	1770.5	1.50	FIT
LINER	7	2049.8	8 1/2	2251.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
465	1.40	16.0		Water Based	
472	1.03	2.0		Water Based	



472	1.20	11.0		Water Based	
490	1.03	120.0		Water Based	
539	1.20	11.0		Water Based	
594	1.40	7.0		Water Based	
594	1.20	20.0		Water Based	
594	1.03	20.0		Water Based	
598	1.19	15.0		Water Based	
869	1.21	17.0		Water Based	
1202	1.20	19.0		Water Based	
1692	1.20	16.0		Water Based	
1774	1.14	21.0		Water Based	
1928	1.16	18.0		Water Based	
2051	1.14	1.0		Brine	
2051	1.16	11.0		Water Based	

Tynnslip i Sokkeldirektoratet

Dybde	Enhet
1906.30	[m]
1907.60	[m]
1915.82	[m]
1918.28	[m]
1923.01	[m]
1924.25	[m]
1930.80	[m]
1935.72	[m]
1936.60	[m]
1941.75	[m]
1946.55	[m]
1949.27	[m]
1950.77	[m]
1951.35	[m]
1953.55	[m]
1954.57	[m]
1959.10	[m]
1960.20	[m]
1963.83	[m]
1965.20	[m]
1971.72	[m]
1973.35	[m]



1974.18	[m]
1976.89	[m]
1977.35	[m]
1988.00	[m]
1902.00	[m]
1977.00	[m]
1983.00	[m]
1989.00	[m]
1995.00	[m]
1998.00	[m]
2001.00	[m]
2004.00	[m]
2007.00	[m]
2013.00	[m]
2016.00	[m]
2019.00	[m]
2022.00	[m]
2025.00	[m]
2031.00	[m]
2034.00	[m]
2037.00	[m]
2043.00	[m]
2049.00	[m]
2055.00	[m]
2061.00	[m]
2067.00	[m]
2073.00	[m]
2076.00	[m]
2079.00	[m]
2085.00	[m]
2091.00	[m]
2097.00	[m]
2100.00	[m]
2103.00	[m]
2106.00	[m]
2109.00	[m]
2112.00	[m]
2118.00	[m]