



Generell informasjon

Brønnbane navn	7120/7-2
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	BARENTS SEA
Felt	SNØHVIT
Funn	7120/7-2 (Gamma)
Brønn navn	7120/7-2
Seismisk lokalisering	513 - 123 SP 996
Utvinningstillatelse	077
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	377-L
Boreinnretning	WEST VANGUARD
Boredager	88
Borestart	26.05.1983
Boreslutt	21.08.1983
Frigitt dato	21.08.1985
Publiseringsdato	11.02.2005
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS/CONDENSATE
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	JURASSIC
1. nivå med hydrokarboner, formasjon.	STØ FM
Avstand, boredekk - midlere havflate [m]	22.0
Vanndybde ved midlere havflate [m]	241.0
Totalt målt dybde (MD) [m RKB]	2523.0
Totalt vertikalt dybde (TVD) [m RKB]	2522.0
Maks inklinasjon [°]	5
Temperatur ved bunn av brønnbanen [°C]	97
Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	FRUHOLMEN FM
Geodetisk datum	ED50
NS grader	71° 19' 11.49" N



ØV grader	20° 19' 44.31" E
NS UTM [m]	7913417.99
ØV UTM [m]	476011.92
UTM sone	34
NPDID for brønnbanen	18

Brønnhistorie

General

Well 7120/7-2 is located in the Snøhvit Field area. The primary of the well was to test possible hydrocarbon accumulations in sandstones of Middle to Early Jurassic age.

Operations and results

Wildcat well 7120/7-2 was spudded with the semi-submersible rig West Vanguard on 26 May 1983 and drilled to TD at 2523 m, 5 meters into Late Triassic rocks. Due to boulders at the spud location the rig was moved 11 m north and respudded. A sand body with shallow gas was encountered at 378 m to 382.5 m and it was decided to set the 20" casing shoe above this sand. After setting this casing the rig was shut down due to strike from 3 June at 2400 hrs to 18 June at 1125 hrs. The well was drilled using gel mud down to 815 m, with gypsum/polymer mud from 815 m to 1515, and dispersed to a lignosulphonate (Unical) mud from 1515 m to TD.

Hydrocarbon accumulations were discovered in the Middle Jurassic Stø Formation sandstone sequence from 2149.5 m down to a gas/water contact at 2228 m. Shows were recorded below 1809 m in the Cretaceous Kolje Formation. Organic geochemical analyses showed that TOC increases down through the Cretaceous, but generally the Cretaceous mudstones were regarded as immature, poor source rocks with a primary potential for gas. Entering into the silty shales and mudstones of the Late Jurassic Hekkingen Formation at 2107 m TOC increases abruptly above 3%. TOC continues to increase to 9 % at the base of the Hekkingen Formation. These shales are potentially very good source rocks for gas and condensate above ca 2120 metres and rich sources for light oil and gas below this depth. Maturity evaluation was difficult due to reworked material and cavings, but most likely the well is immature all through, possibly marginally mature below ca 2000 m. Five cores were cut in the sandstones from 2168 m to 2244 m. Four RFT samples were taken. Sample 1 was taken at 2150 m (gas, mud filtrate and film of condensate), sample 2 at 2151 m (gas, mud filtrate and condensate, sample 3 at 2225 m (mud filtrate and water), and sample 4 at 2220 m (mud filtrate and minor gas).

The well was permanently abandoned on 21 August as a gas/condensate discovery.

Testing

One DST was performed in the Stø Formation in the intervals 2168 m to 2179.8 m and 2153 m to 2164.8 m. The lower interval was intended for pressure monitoring to test possible communication between the two zones, but the pressure recordings failed. The test produced 702450 Sm³ gas and 31.5 Sm³ condensate /day on a 64/64 choke during the main flow. Condensate density was 0.77 g/cm³ and the gas gravity was 0.68 (air = 1) with a CO₂ content of 5%. No H₂S was recorded. This corresponds to a very dry gas condensate similar to the 7120/7 and 7120/8 hydrocarbon systems.

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Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
330.00	2520.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2166.0	2184.0	[m]
2	2184.0	2190.0	[m]
3	2190.0	2208.0	[m]
4	2208.0	2226.8	[m]
5	2226.8	2244.4	[m]

Total kjerneprøve lengde [m]	78.4
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2166-2172m



2172-2178m



2178-2184m



2184-2188m



2190-2196m



2196-2202m



2202-2207m



2208-2214m



2214-2220m



2220-2226m





2226-2227m 2227-2232m 2232-2238m 2238-2244m

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
700.0	[m]	DC	PAS
760.0	[m]	DC	PAS
780.0	[m]	DC	PAS
800.0	[m]	DC	PAS
840.0	[m]	DC	PAS
890.0	[m]	DC	
930.0	[m]	DC	
950.0	[m]	DC	OD
960.0	[m]	DC	OD
970.0	[m]	DC	OD
980.0	[m]	DC	OD
990.0	[m]	DC	PAS
1000.0	[m]	DC	
1000.0	[m]	DC	PAS
1000.0	[m]	DC	OD
1023.0	[m]	SWC	PAS
1050.0	[m]	SWC	PAS
1060.0	[m]	DC	PAS
1100.0	[m]	SWC	PAS
1100.0	[m]	DC	
1126.5	[m]	SWC	PAS
1140.0	[m]	DC	OD
1150.0	[m]	DC	OD
1152.5	[m]	SWC	PAS
1160.0	[m]	DC	OD
1160.0	[m]	DC	PAS
1185.0	[m]	SWC	PAS
1200.0	[m]	DC	
1218.0	[m]	SWC	PAS
1227.3	[m]	DC	PAS
1239.0	[m]	DC	OD
1247.5	[m]	SWC	PAS
1251.0	[m]	DC	OD
1257.0	[m]	DC	PAS



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 12.5.2024 - 13:05

1260.0 [m]	DC	OD
1269.0 [m]	DC	OD
1272.8 [m]	DC	PAS
1299.0 [m]	DC	
1302.0 [m]	DC	PAS
1317.0 [m]	DC	PAS
1340.0 [m]	SWC	PAS
1370.0 [m]	SWC	PAS
1380.0 [m]	DC	PAS
1400.0 [m]	SWC	PAS
1404.0 [m]	DC	
1423.0 [m]	SWC	PAS
1437.0 [m]	DC	PAS
1452.0 [m]	DC	PAS
1470.0 [m]	SWC	PAS
1490.0 [m]	SWC	PAS
1497.0 [m]	DC	PAS
1500.0 [m]	DC	
1512.0 [m]	DC	PAS
1525.0 [m]	SWC	PAS
1542.0 [m]	DC	PAS
1557.0 [m]	DC	PAS
1572.0 [m]	DC	PAS
1587.0 [m]	SWC	PAS
1599.0 [m]	DC	
1602.0 [m]	DC	PAS
1617.0 [m]	DC	PAS
1632.0 [m]	DC	PAS
1647.0 [m]	DC	PAS
1677.0 [m]	DC	PAS
1690.0 [m]	DC	PAS
1701.0 [m]	DC	PAS
1701.0 [m]	DC	
1720.0 [m]	SWC	PAS
1737.0 [m]	DC	PAS
1752.0 [m]	DC	PAS
1767.0 [m]	DC	PAS
1790.0 [m]	SWC	PAS
1797.0 [m]	DC	
1812.0 [m]	DC	PAS



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 12.5.2024 - 13:05

1827.0 [m]	DC	PAS
1842.0 [m]	DC	PAS
1857.0 [m]	DC	PAS
1872.0 [m]	DC	PAS
1887.0 [m]	DC	PAS
1899.0 [m]	DC	
1900.0 [m]	SWC	PAS
1917.0 [m]	DC	PAS
1932.0 [m]	DC	PAS
1962.0 [m]	DC	PAS
1977.0 [m]	DC	PAS
1992.0 [m]	DC	PAS
2001.0 [m]	DC	
2007.0 [m]	DC	PAS
2020.0 [m]	SWC	PAS
2031.0 [m]	DC	PAS
2040.0 [m]	DC	
2046.0 [m]	DC	PAS
2061.0 [m]	DC	PAS
2076.0 [m]	DC	PAS
2091.0 [m]	DC	PAS
2100.0 [m]	DC	
2107.0 [m]	SWC	PAS
2115.0 [m]	DC	PAS
2139.0 [m]	SWC	PAS
2139.0 [m]	DC	
2141.5 [m]	SWC	PAS
2147.0 [m]	SWC	PAS
2151.0 [m]	DC	
2166.0 [m]	DC	PAS
2181.0 [m]	C	PAS
2183.6 [m]	C	PAS
2184.5 [m]	C	PAS
2193.6 [m]	C	PAS
2202.7 [m]	C	PAS
2274.0 [m]	SWC	PAS
2292.0 [m]	DC	PAS
2306.5 [m]	SWC	PAS
2322.0 [m]	DC	PAS
2337.0 [m]	DC	PAS



2352.0	[m]	DC	PAS
2367.0	[m]	DC	PAS
2397.0	[m]	DC	PAS
2412.0	[m]	DC	PAS
2442.0	[m]	DC	PAS
2457.0	[m]	DC	PAS
2477.0	[m]	SWC	PAS
2492.0	[m]	DC	PAS
2502.0	[m]	DC	PAS
2517.0	[m]	DC	PAS
2520.0	[m]	DC	PAS

Oljeprøver i Søkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST	TEST1	2153.00	2180.00		11.08.1983 - 18:55	NO

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
263	NORDLAND GP
380	SOTBAKKEN GP
380	TORSK FM
947	NYGRUNNEN GP
947	KVEITE FM
1092	ADVENTDALEN GP
1092	KOLMULE FM
1666	KOLJE FM
1987	KNURR FM
2017	HEKKINGEN FM
2141	FUGLEN FM
2150	KAPP TOSCANA GP
2150	STØ FM
2256	NORDMELA FM
2387	TUBÅEN FM
2435	FRUHOLMEN FM



Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
18	pdf	0.44

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
18 1	pdf	1.14
18 2	pdf	4.78

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
18 01 WDSS General Information	pdf	0.17
18 02 WDSS completion log	pdf	0.26

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
18 01 Completion Report	pdf	18.92
18 02 Completion log	pdf	1.29

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.1	2187	2193	0.0
1.2	2168	2180	0.0
1.3	2153	2164	25.4





Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningsstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.1				
1.2				
1.3				85

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstygde rel. luft	GOR [m3/m3]
1.1					
1.2					
1.3	30	702000	0.770	0.680	23400

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL GR	263	800
CBL VDL GR	263	1502
CBL VDL GR CCL	1352	2370
CST	815	1490
CST	1523	2508
DLL MSFL GR	2125	2300
HDT GR	800	1512
ISF BHC GR	365	1514
ISF BHC GR	2125	2516
ISF BHC MSFL GR	263	411
ISF BHC MSFL GR	1502	2222
LDL CNL GR	325	411
LDL CNL NGT	1514	2517
LDL GR	365	1514
RFT	2150	2491
RFT	2151	2151
RFT	2219	2219
RFT	2225	2225
SHDT GR	1502	2517
VELOCITY	400	2510



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	325.5	36	330.0	0.00	LOT
SURF.COND.	20	365.0	26	367.0	0.00	LOT
INTERM.	13 3/8	800.0	17 1/2	815.0	1.65	LOT
INTERM.	9 5/8	1502.0	12 1/4	1515.0	1.80	LOT
LINER	7	2523.0	8 1/2	2523.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
296	1.05			spud mud	
410	1.10	45.0	29.0	water based	
825	1.14	48.0	40.0	water based	
1515	1.25	52.0	21.0	water based	
2115	1.32	55.0	18.0	water based	
2523	1.20	53.0	11.0	water based	

Trykkplott

Porertrykksdataene kommer fra logging i brønnen hvis ingen annen kilde er oppgitt. I noen brønner der trykk ikke er logget, er det brukt informasjon fra formasjonstester eller brønnspark. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
18 Formation pressure (Formasjonstrykk)	pdf	0.28

