



Generell informasjon

Brønnbane navn	7120/7-3
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	BARENTS SEA
Brønn navn	7120/7-3
Seismisk lokalisering	8106 - 342 SP. 164
Utvinningstillatelse	077
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	408-L
Boreinnretning	WEST VANGUARD
Boredager	84
Borestart	18.03.1984
Boreslutt	09.06.1984
Frigitt dato	09.06.1986
Publiseringsdato	18.05.2004
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	22.0
Vanndybde ved midlere havflate [m]	259.0
Totalt målt dybde (MD) [m RKB]	3062.0
Totalt vertikalt dybde (TVD) [m RKB]	3061.0
Maks inklinasjon [°]	2.9
Temperatur ved bunn av brønnbanen [°C]	97
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	NORDMELA FM
Geodetisk datum	ED50
NS grader	71° 27' 43.31" N
ØV grader	20° 10' 46.44" E
NS UTM [m]	7929340.44
ØV UTM [m]	470886.27
UTM sone	34
NPDID for brønnbanen	104



Brønnhistorie

General

Wildcat well 7120/7-3 is located on the Ringvassøy-Loppa Fault Complex west of the Hammerfest Basin and the Snøhvit Field. The primary objective of the well was to test possible hydrocarbon accumulations in sandstones of Middle to Lower Jurassic age.

Operations and results

The well was spudded with the semi-submersible rig West Vanguard on 18 March 1984 and drilled to TD at 3062 m in the Early Jurassic Nordmela Formation. The well was drilled with seawater and bentonite down to 331 m, with lignosulfonate/gypsum/polymer mud from 331 m to 715 m, with gypsum/polymer mud from 715 m to 1720 m, with polymer mud from 1720 m to 2625 m, and with lignite/polymer mud from 2625 m to TD. The 36" hole had to be reamed before setting of the 30" casing. During cementing of 20" casing returns were lost. Technical problems occurred when testing the BOP stack before drilling out of the 20" casing shoe, and after the 13 3/8" casing job. Mud problems occurred when drilling out of the 20" casing shoe due to cement contamination. Because of tilted wellhead two attempts to run in the casing was needed. When running in an 8 1/2" bit to perform leak off test below the 9 5/8" casing shoe, problems occurred getting the bit through wearbushing in wellhead. After this 4 kg junk was recovered from the hole.

The well penetrated Tertiary, Cretaceous, and Jurassic sediments. Lithology down to 2759 m (Base Cretaceous) was dominantly claystone with stringers of sandstone/siltstone/Limestone/Dolomite. The Late Jurassic Hekkingen Formation from 2759 m to 2889 m consisted of shale with stringers of siltstone and limestone and traces of sand. Pyrite was seen in trace amounts in the upper part and was abundant in the lower part of the sequence. From 2889 m to TD, in the Middle to Early Jurassic, the lithology was sandstone with shale interbeds. Trace to faint shows were recorded in claystone cuttings below 1200 m. Good shows, probably residual oil, was recorded on core 2 in the top 1.5 m of the Middle Jurassic Stø Sandstone. Poor to fair shows were seen in sandstones on the cores below this depth down to 2909 m and occasionally on cuttings below 2909 to TD.

Geochemical analyses showed that the sediments are marginally mature already at 1350 m, and have reached peak oil maturity from 2750 m down to TD. The Late Jurassic interval from 2759 m to 2863 m is the best source rock in the well with potential for gas and light oil. The claystones above the Jurassic contain sequences with fair to medium source potential, particularly in the Late - Middle Barremian from ca 2170 m to 2580 m has a total organic content in the range 2% - 4% throughout. However, Hydrogen Index was found to be quite moderate throughout the well, not exceeding 150 mg/g in any source sequence.

Three cores were cut in the interval from 2867 m to 2910 m in the Middle to Late Jurassic. A segregated RFT sample was taken at 2889.5 m. It recovered only water. The well was permanently abandoned as dry with shows on 9 June 1984.

Testing

No drill stem test was performed



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
332.00	3058.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2867.0	2884.4	[m]
2	2885.0	2898.5	[m]
3	2899.0	2909.5	[m]

Total kjerneprøve lengde [m]	41.4
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2867-2872m



2873-2878m



2879-2884m



2885-2890m



2891-2896m



2897-2898m



2899-2904m



2905-2909m

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
281	NORDLAND GP
380	SOTBAKKEN GP



380	TORSK FM
1312	NYGRUNNEN GP
1312	KVEITE FM
1496	ADVENTDALEN GP
1496	KOLMULE FM
2570	KOLJE FM
2679	KNURR FM
2759	HEKKINGEN FM
2863	FUGLEN FM
2889	KAPP TOSCANA GP
2889	STØ FM
2969	NORDMELA FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
104	pdf	0.51

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
104 1	pdf	2.11

Dokumenter - eldre Sökkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
104 01 WDSS General Information	pdf	0.18
104 02 WDSS completion log	pdf	0.29

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
104 7120 7 3 COMPLETION REPORT AND LOG	pdf	26.91





Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL CST 9 5/8'	0	0
CBL VDL GR 13 3/8'	0	0
CBL VDL GR 20'	0	0
HDT GR	700	1412
ISF SON GR	281	715
ISF SON GR	700	1718
ISF SON GR	1698	2621
ISF SON MSFL GR	2605	3059
LDT CNL GR	331	715
LDT CNL GR	1698	2621
LDT CNL NGT	2605	3060
LDT GR	700	1719
MWD	335	2735
RFT	2887	2998
SHDT GR	1698	2623
SHDT GR	2605	3059
VSP	650	3050

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	331.5	36	331.5	0.00	LOT
SURF.COND.	20	700.0	26	715.0	1.56	LOT
INTERM.	13 3/8	1700.0	17 1/2	1720.0	1.79	LOT
INTERM.	9 5/8	2605.0	12 1/4	2625.0	1.59	LOT
OPEN HOLE		3062.0	8 1/2	3062.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
365	1.05	8.0	24.0	WATER BASED	
450	1.06			WATER BASED	



550	1.08			WATER BASED	
725	1.10	8.0	4.0	WATER BASED	
950	1.14	16.0	15.0	WATER BASED	
1025	1.15	12.0	17.0	WATER BASED	
1230	1.21	17.0	16.0	WATER BASED	
1600	1.20	16.0	19.0	WATER BASED	
1730	1.30	15.0	8.0	WATER BASED	
1930	1.48	13.0	11.0	WATER BASED	
2145	1.30	12.0	16.0	WATER BASED	
2225	1.40	13.0	17.0	WATER BASED	
2635	1.20	17.0	13.0	WATER BASED	
2815	1.25	18.0	16.0	WATER BASED	
2855	1.35	21.0	18.0	WATER BASED	
2910	1.38	21.0	14.0	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]
104 Formation pressure (Formasjonstrykk)	pdf	0.27

