



Generell informasjon

Brønnbane navn	6305/12-2
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Brønn navn	6305/12-2
Seismisk lokalisering	NH 9203-410 & SP. 890
Utvinningstillatelse	154
Boreoperatør	Norsk Hydro Produksjon AS
Boretillatelse	772-L
Boreinnretning	DEEPSEA BERGEN
Boredager	63
Borestart	16.10.1993
Boreslutt	17.12.1993
Frigitt dato	17.12.1995
Publiseringssdato	08.08.2005
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	23.0
Vanndybde ved midlere havflate [m]	146.0
Totalt målt dybde (MD) [m RKB]	3162.0
Totalt vertikalt dybde (TVD) [m RKB]	3161.0
Maks inklinasjon [°]	3.8
Temperatur ved bunn av brønnbanen [°C]	121
Eldste penetrerte alder	PRE-DEVONIAN
Eldste penetrerte formasjon	BASEMENT
Geodetisk datum	ED50
NS grader	63° 1' 11.39" N
ØV grader	5° 40' 6.44" E
NS UTM [m]	6990772.25
ØV UTM [m]	635050.51
UTM sone	31
NPID for brønnbanen	2207



Brønnhistorie

General

Well 6305/12-2 is located in the southwestern part of block 6305/12 in the Slørebotn Sub-basin. The primary objective

was to test the hydrocarbon and reservoir potential of a stratigraphic Cretaceous Wedge Prospect of anticipated Aptian to Cenomanian age. The secondary objective was to test the reservoir quality and hydrocarbon potential of a structural closure at the Base Cretaceous level called the E-prospect.

Operations and results

Wildcat well 6305/12-2 was spudded with the semi-submersible installation Deepsea Bergen on 16 October and drilled to TD at 3162 m in the metamorphic basement. A kick occurred at 2973 m, in the top of Middle Jurassic sandstone, requiring increases in mud density to 1.45 sg and resulting in lost circulation further up the hole, most likely into the Paleocene Sandstone unit. After 7" liner was set to 2635 m background gas up to 10.5 %, formation gas peaks to 13.6 % and pumps-off gas peaks to 15.5 % made it necessary to increase the mud density in stages from 1.50 sg to 1.73 sg. The one successful FMT point, at 3000 m, showed formation pressure to be 1.69 sg in a very tight sandstone. The kick and technical problems related to coring led to two technical sidetracks that should be considered when evaluating logs and cores: the first from 2670 m to 2974 m and the second from 2910 m to final TD. The well was drilled with seawater and bentonite down to 437 m and with the ANCO-2000 KCl/glycol mud system from 437 m to TD.

The mapped stratigraphic wedge supposed to be of Cretaceous age was encountered at 2970 m and proved to be Middle Jurassic sediments. The sediments were gas bearing, but with extremely poor reservoir properties. The possible reservoir in the E - prospect consisted of metamorphic basement with no significant porosity or permeability. Moderate shows were observed in the Late Cretaceous, in sandstone stringers from 2530 m to 2580 m and in limestone and dolomite stringers from 2630 m to 2730 m. Spotted moderate shows were recorded again in thin sandstone stringers in the Early Cretaceous from 2750 m to 2830. Poor to very poor shows were seen from 2965 m 3144.5 m in the Middle Jurassic. The organic geochemical source rock screening was seriously affected by glycols in the mud system, so the only source rocks that could be ascertained with certainty were the coals and carbargillites of the Middle Jurassic. A very thin Late Jurassic shale at 2966 m was not sampled. The well appears to be immature through the Cretaceous and in the oil window from base Cretaceous to TD.

A total of 6 cores were cut at intervals through the well. Core 1 and 2 were cut in the first sidetrack and cores 3 - 6 were cut in the second sidetrack. One FMT fluid sample at 3001 m recovered water, mud filtrate and a small amount of gas.

The well was permanently abandoned on 16 December as a well with shows in the Cretaceous and gas in Middle Jurassic tight sands.

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
440.00	2979.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2964.0	2968.3	[m]
2	2971.0	2975.0	[m]
3	2975.0	2983.5	[m]
4	3002.0	3009.6	[m]
5	3016.0	3022.8	[m]
6	3158.0	3160.7	[m]

Total kjerneprøve lengde [m]	33.9
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
440.0	[m]	DC	RRI
460.0	[m]	DC	RRI
480.0	[m]	DC	RRI
500.0	[m]	DC	RRI
520.0	[m]	DC	RRI
540.0	[m]	DC	RRI
560.0	[m]	DC	RRI
580.0	[m]	DC	RRI
600.0	[m]	DC	RRI
620.0	[m]	DC	RRI
640.0	[m]	DC	RRI
660.0	[m]	DC	RRI
680.0	[m]	DC	RRI
700.0	[m]	DC	RRI
720.0	[m]	DC	RRI
740.0	[m]	DC	RRI



760.0	[m]	DC	RRI
780.0	[m]	DC	RRI
800.0	[m]	DC	RRI
820.0	[m]	DC	RRI
840.0	[m]	DC	RRI
860.0	[m]	DC	RRI
880.0	[m]	DC	RRI
900.0	[m]	DC	RRI
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940.0	[m]	DC	RRI
960.0	[m]	DC	RRI
980.0	[m]	DC	RRI
1000.0	[m]	DC	RRI
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1040.0	[m]	DC	RRI
1060.0	[m]	DC	RRI
1080.0	[m]	DC	RRI
1100.0	[m]	DC	RRI
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1140.0	[m]	DC	RRI
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1180.0	[m]	DC	RRI
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1290.0	[m]	DC	RRI
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1330.0	[m]	DC	RRI
1350.0	[m]	DC	RRI
1370.0	[m]	DC	RRI
1390.0	[m]	DC	RRI
1410.0	[m]	DC	RRI
1430.0	[m]	DC	RRI
1450.0	[m]	DC	RRI
1470.0	[m]	DC	RRI
1490.0	[m]	DC	RRI
1510.0	[m]	DC	RRI
1530.0	[m]	DC	RRI



1550.0	[m]	DC	RRI
1570.0	[m]	DC	RRI
1590.0	[m]	DC	RRI
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1630.0	[m]	DC	RRI
1650.0	[m]	DC	RRI
1670.0	[m]	DC	RRI
1710.0	[m]	DC	RRI
1730.0	[m]	DC	RRI
1750.0	[m]	DC	RRI
1770.0	[m]	DC	RRI
1790.0	[m]	DC	RRI
1810.0	[m]	DC	RRI
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2290.0	[m]	DC	RRI
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2320.0	[m]	DC	RRI
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2370.0	[m]	DC	RRI
2380.0	[m]	DC	RRI
2390.0	[m]	DC	RRI
2400.0	[m]	DC	RRI
2410.0	[m]	DC	RRI
2420.0	[m]	DC	RRI
2430.0	[m]	DC	RRI
2440.0	[m]	DC	RRI
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2550.0	[m]	DC	RRI



2560.0	[m]	DC	RRI
2570.0	[m]	DC	RRI
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2680.0	[m]	DC	RRI
2690.0	[m]	DC	RRI
2700.0	[m]	DC	RRI
2710.0	[m]	DC	RRI
2720.0	[m]	DC	RRI
2730.0	[m]	DC	RRI
2740.0	[m]	DC	RRI
2750.0	[m]	DC	RRI
2760.0	[m]	DC	RRI
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2850.0	[m]	DC	RRI
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2880.0	[m]	DC	OD
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2905.0	[m]	DC	RRI



2910.0	[m]	DC	OD
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2925.0	[m]	DC	RRI
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2940.0	[m]	DC	RRI
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2945.0	[m]	DC	RRI
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2955.0	[m]	DC	RRI
2955.0	[m]	DC	OD
2962.0	[m]	DC	RRI
2962.0	[m]	DC	OD
2964.0	[m]	C	OD
2965.0	[m]	C	OD
2965.0	[m]	DC	RRI
2966.0	[m]	C	OD
2966.5	[m]	C	RRI
2966.9	[m]	C	RRI
2967.0	[m]	C	OD
2968.0	[m]	C	OD
2968.3	[m]	C	OD
2968.3	[m]	C	RRI
2970.0	[m]	DC	RRI
2971.8	[m]	C	RRI
2972.0	[m]	DC	RRI
2973.7	[m]	C	RRI
2975.0	[m]	C	RRI
2983.0	[m]	C	RRI
3002.0	[m]	DC	RRI



3008.9 [m]	C	RRI
3124.0 [m]	DC	RRI
3147.0 [m]	DC	RRI

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
169	NORDLAND GP
601	HORDALAND GP
1191	ROGALAND GP
1191	TARE FM
1274	TANG FM
1848	EGGA FM (INFORMAL)
1919	TANG FM
1936	SHETLAND GP
1936	SPRINGAR FM
1980	NISE FM
2395	KVITNOS FM
2487	CROMER KNOLL GP
2487	LYSING FM
2505	LANGE FM
2966	VIKING GP
2966	SPEKK FM
2967	UNDIFFERENTIATED
2970	UNDEFINED GP
3145	BASEMENT

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
2207_6305_12_2	pdf	0.56

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
2207_1	pdf	1.48





Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
2207_6305_12_2_COMPLETION_REPORT_AN_D_LOG	pdf	15.88

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBIL SP GR	2635	3159
DIFL ACL ZDL CN SP GR CHT	398	1212
FMT CHT GR	2966	3037
FMT CHT GR	3001	3001
MAC GR	1200	3158
MLL DLL ACL ZDL CN SP GR CHT	2613	3158
MWD - GR DIR	2670	3162
MWD - GR RES DIR	169	2973
SWC GR	2923	3135
SWC GR	2923	3081
VSP	255	3155

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	222.0	36	222.0	0.00	LOT
INTERM.	13 3/8	398.0	17 1/2	400.0	1.38	LOT
INTERM.	9 5/8	1229.0	12 1/4	1230.0	1.85	LOT
LINER	7	2635.0	8 1/2	2635.0	0.00	LOT
OPEN HOLE		3162.0	6	3162.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
174	1.34	23.0	10.0	WATER BASED	20.12.1993





185	1.30	23.0	9.5	WATER BASED	20.12.1993
226	1.03			WATER BASED	20.10.1993
226	1.03			WATER BASED	20.10.1993
437	1.50			WATER BASED	20.10.1993
437	1.50			WATER BASED	20.10.1993
437	1.20			WATER BASED	21.10.1993
695	1.10	16.0	8.0	WATER BASED	26.10.1993
1238	1.10	23.0	8.5	WATER BASED	26.10.1993
1244	1.14	26.0	10.0	WATER BASED	26.10.1993
1244	1.14	22.0	9.0	WATER BASED	27.10.1993
1244	1.20	22.0	9.5	WATER BASED	01.11.1993
1528	1.20	26.0	15.5	WATER BASED	01.11.1993
1843	1.20	30.0	15.0	WATER BASED	01.11.1993
1988	1.20	24.0	16.0	WATER BASED	01.11.1993
2213	1.25	24.0	15.0	WATER BASED	01.11.1993
2530	1.82	22.0	11.0	WATER BASED	14.12.1993
2530	1.30	15.0	7.5	WATER BASED	15.12.1993
2569	1.25	24.0	16.0	WATER BASED	02.11.1993
2635	1.50	28.0	15.5	WATER BASED	17.11.1993
2635	1.50	29.0	16.0	WATER BASED	18.11.1993
2670	1.50	25.0	15.0	WATER BASED	16.11.1993
2670	1.50	26.0	15.0	WATER BASED	16.11.1993
2670	1.50	29.0	15.5	WATER BASED	16.11.1993
2670	1.50	24.0	12.0	WATER BASED	16.11.1993
2802	1.50	30.0	18.0	WATER BASED	19.11.1993
2866	1.82	42.0	12.0	WATER BASED	13.12.1993
2876	1.35	32.0	20.0	WATER BASED	03.11.1993
2884	1.35	31.0	16.5	WATER BASED	08.11.1993
2899	1.50	30.0	17.5	WATER BASED	23.11.1993
2901	1.55	30.0	17.5	WATER BASED	23.11.1993
2920	1.35	34.0	21.0	WATER BASED	08.11.1993
2934	1.60	40.0	19.0	WATER BASED	23.11.1993
2962	1.35	34.0	21.0	WATER BASED	08.11.1993
2964	1.63	41.0	19.0	WATER BASED	23.11.1993
2964	1.73	44.0	18.0	WATER BASED	24.11.1993
2973	1.52	34.0	21.5	WATER BASED	11.11.1993
2973	1.50	34.0	21.5	WATER BASED	11.11.1993
2973	1.50	36.0	17.0	WATER BASED	11.11.1993
2973	1.50	36.0	17.0	WATER BASED	11.11.1993
2973	1.50	24.0	11.0	WATER BASED	12.11.1993



2973	1.50	36.0	17.0	WATER BASED	11.11.1993
2973	1.50	23.0	12.0	WATER BASED	12.11.1993
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2979	1.73	43.0	15.5	WATER BASED	26.11.1993
2989	1.73	41.0	12.5	WATER BASED	01.12.1993
3003	1.73	41.0	12.0	WATER BASED	02.12.1993
3016	1.73	40.0	12.5	WATER BASED	06.12.1993
3025	1.73	41.0	13.0	WATER BASED	06.12.1993
3100	1.73	41.0	15.0	WATER BASED	06.12.1993
3143	1.73	41.0	16.5	WATER BASED	06.12.1993
3143	1.73	41.0	15.0	WATER BASED	06.12.1993
3159	1.73	41.0	15.0	WATER BASED	07.12.1993
3162	1.73	39.0	14.5	WATER BASED	08.12.1993
3162	1.76	43.0	15.0	WATER BASED	09.12.1993
3162	1.76			WATER BASED	13.12.1993
3162	1.76	40.0	15.0	WATER BASED	13.12.1993
3162	1.76	38.0	14.0	WATER BASED	13.12.1993

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]
2207 Formation pressure (Formasjonstrykk)	PDF	0.21

