



Generell informasjon

Brønnbane navn	6/3-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	GAUPE
Funn	6/3-1 PI
Brønn navn	6/3-1
Seismisk lokalisering	511-115 SP. 160
Utvinningstillatelse	086
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	441-L
Boreinnretning	DEEPSEA BERGEN
Boredager	92
Borestart	02.11.1984
Boreslutt	01.02.1985
Frigitt dato	01.02.1987
Publiseringsdato	11.02.2005
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	INTRA DRAUPNE FM SS
2. nivå med hydrokarboner, alder	LATE CRETACEOUS
2. nivå med hydrokarboner, formasjon	HOD FM
3. nivå med hydrokarboner, alder	LATE TRIASSIC
3. nivå med hydrokarboner, formasjon	SKAGERRAK FM
Avstand, boredekk - midlere havflate [m]	23.0
Vanndybde ved midlere havflate [m]	86.0
Totalt målt dybde (MD) [m RKB]	3560.0
Totalt vertikalt dybde (TVD) [m RKB]	3560.0
Maks inklinasjon [°]	2



Temperatur ved bunn av brønnbanen [°C]	148
Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	SKAGERRAK FM
Geodetisk datum	ED50
NS grader	57° 58' 10.2" N
ØV grader	1° 55' 30.38" E
NS UTM [m]	6425966.20
ØV UTM [m]	436408.30
UTM sone	31
NPDID for brønnbanen	450

Brønnhistorie



General

Wildcat well 6/3-1 was drilled on the Pi-structure in the northwestern part of the block. The well is situated less than 1 km from the UK-Norwegian median line, where the UK Drake Field, an oil/gas field in UK block 2215 was discovered close to the median line. Well 6/3-1 was designed to test possible hydrocarbon accumulations at different levels. The main target was Jurassic and Triassic sandstones. Secondary targets were Paleocene sandstones (Heimdal Formation), and Late Cretaceous porous/fractured chalk.

Operations and results

The well was spudded with the semi-submersible installation Deepsea Bergen 2 November 1984 and drilled to TD at 3560 m in the Triassic Skagerrak Formation. Drilling of the well proceeded without significant problems, but five and a half rig days were spent waiting on weather. The well was drilled with gel/seawater to 520 m, with gypsum/polymer from 520 m to 2926 m, and with lignite/lignosulphonate from 2926 m to TD.

Target reservoir sandstones of Jurassic/Triassic age came in at 2965 m with oil and gas/condensate. A hydrocarbon column of 72 m was proven with oil/water contact at 3037 m. FMT gradients and oil stain on cores indicated a GOC at 3013 m. Secondary target sand (Heimdal Formation) was not found. Logs and shows indicated hydrocarbons in Late Cretaceous chalk/limestone, most strongly from 2900 m to 2925 m, but test of this interval was negative. FMT pressure measurements in the larger interval from 2804 m to 2918.5 m in the chalk were all unsuccessful and showed a tight formation. Eight cores were cut in the well from 2968 m to 3116.5 m. Segregated FMT samples were taken at 3021.5 m (0.87 g/cm³-oil and gas), at 3007.5 m (0.780 g/cm³-condensate, gas, and mud filtrate), at 3016 m (oil, mud filtrate, and gas), at 2992 m (0.77 g/cm³-condensate, mud filtrate, and gas), at 2998.5 m (condensate and gas), and at 2966 m (0.77 g/cm³-condensate, mud filtrate, and gas).

The well was permanently abandoned as an oil and gas discovery on 2 January 1985.

Testing

Three Drill Stem Tests were performed. DST 1 at 3015 m to 3023 m produced 907.5 m³ oil/day and 140 700 Sm³ gas/day on a 64/64" choke and wellhead pressure equal to 51.7 bar. CO₂ content in the gas was 2.2 % and H₂S content was 1.1 ppm. DST 2 at 2978 m to 2993 m produced 409.4 m³ oil/day and 889 900 Sm³ gas/day on a 72/64" choke and wellhead pressure equal to 95.8 bar. CO₂ content in the gas was 2.0 % and H₂S content was 2.0 ppm. DST 3 at 2902-2921 m was opened up on a 12/64" choke. It gave no response from the well. Acid was pumped to stimulate flow, but only 2.6 m³ diesel cushion was produced before the well died. Mud with traces of oil was recovered when reversing out the string volume above the circulating valve.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
180.00	3560.00

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



Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2967.0	2985.3	[m]
2	2986.0	2987.7	[m]
3	2988.0	3006.7	[m]
4	3007.0	3024.9	[m]
5	3025.0	3043.0	[m]
6	3043.0	3061.6	[m]
7	3061.6	3089.0	[m]
8	3089.0	3116.5	[m]

Total kjerneprøve lengde [m]	148.1
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



3025-3043m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



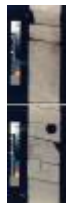
2967-2985m



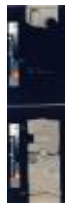
2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



2967-2985m



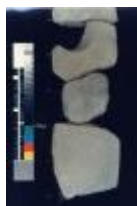
2967-2985m



2967-2985m



2967-2985m



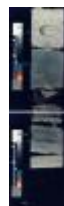
2967-2985m



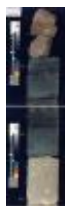
2986-2987m



2986-2987m



2986-2987m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



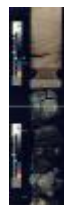
2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



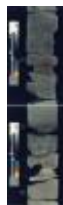
2988-3006m



2988-3006m



2988-3006m



2988-3006m



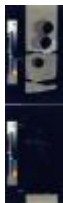
2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



2988-3006m



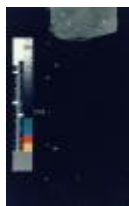
2988-3006m



2988-3006m



2988-3006m



2988-3006m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



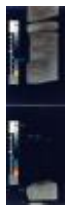
3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3024m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



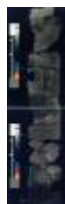
3007-3025m



3007-3025m



3007-3025m



3007-3025m



3007-3025m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



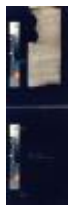
3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



3025-3043m



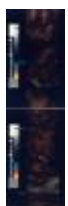
3025-3043m



3025-3043m



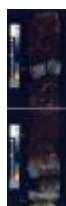
3025-3043m



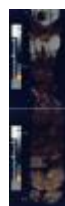
3025-3043m



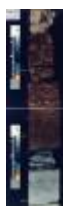
3025-3043m



3025-3043m



3025-3043m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



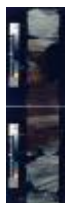
3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



3043-3061m



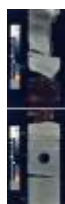
3043-3061m



3043-3061m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



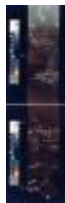
3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3061-3089m



3089-3116m



3089-3116m



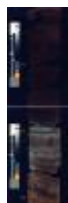
3089-3116m



3089-3116m



3089-3116m



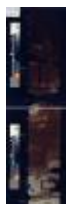
3089-3116m



3089-3116m



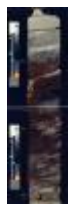
3089-3116m



3089-3116m



3089-3116m



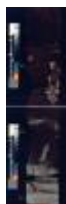
3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m



3089-3116m

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
2410.0	[m]	DC	
2445.0	[m]	DC	
2475.0	[m]	DC	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 31.5.2024 - 23:26

2507.5	[m]	SWC	
2537.5	[m]	SWC	
2567.5	[m]	SWC	
2602.5	[m]	SWC	
2640.0	[m]	DC	
2960.0	[m]	DC	STATOIL
2965.0	[m]	DC	STATOI
2969.5	[m]	C	
2970.0	[m]	DC	STATOIL
2975.0	[m]	DC	STATOI
2980.0	[m]	DC	STATOI
2980.7	[m]	C	
2985.0	[m]	DC	STATOIL
2986.8	[m]	C	
2987.5	[m]	C	
2988.3	[m]	C	
2990.0	[m]	DC	STATOIL
2995.0	[m]	DC	STATOI
2996.4	[m]	C	
3000.0	[m]	DC	STATOIL
3004.4	[m]	C	
3007.0	[m]	DC	STATOIL
3011.5	[m]	SWC	
3012.5	[m]	SWC	STATOIL
3020.0	[m]	DC	STATOI
3022.7	[m]	C	
3027.5	[m]	SWC	STATOIL
3028.5	[m]	SWC	
3032.5	[m]	SWC	STATOIL
3037.0	[m]	DC	STATOI
3043.5	[m]	SWC	
3045.0	[m]	DC	STATOIL
3057.5	[m]	SWC	STATOI
3065.0	[m]	DC	STATOI
3400.0	[m]	DC	STATOI
3410.0	[m]	DC	STATOI
3420.0	[m]	DC	STATOI
3430.0	[m]	DC	STATOI
3450.0	[m]	DC	STATOI
3460.0	[m]	DC	STATOI



3470.0	[m]	DC	STATOI
3480.0	[m]	DC	STATOI
3490.0	[m]	DC	STATOI
3500.0	[m]	DC	STATOI
3510.0	[m]	DC	STATOI
3520.0	[m]	DC	STATOI
3530.0	[m]	DC	STATOI
3540.0	[m]	DC	STATOI
3550.0	[m]	DC	STATOI
3560.0	[m]	DC	STATOI

Oljeprøver i Søkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST	TEST1	3023.00	3015.00		08.01.1985 - 00:00	YES
DST	TEST2	2993.00	2978.00		15.01.1985 - 22:30	YES
DST	TEST3	2921.00	2902.00		21.01.1985 - 00:00	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
109	NORDLAND GP
1183	HORDALAND GP
2435	ROGALAND GP
2435	BALDER FM
2449	SELE FM
2536	LISTA FM
2637	VÅLE FM
2673	SHETLAND GP
2673	EKOFISK FM
2679	TOR FM
2744	HOD FM
2922	CROMER KNOLL GP
2922	SOLA FM
2950	ÅSGARD FM



2963	VIKING GP
2963	DRAUPNE FM
2965	INTRA DRAUPNE FM SS
2978	NO GROUP DEFINED
2978	SKAGERRAK FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
450	pdf	0.54

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
450_1	pdf	6.74

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
450_01_WDSS_General_Information	pdf	0.26
450_02_WDSS_completion_log	pdf	0.26

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
450_01_Completion_Report	pdf	13.18
450_02_Completion_log	pdf	1.98

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	3015	3023	19.5
1.1	3015	3023	25.4





2.0	2978	2993	25.4
3.0	2902	2921	0.0

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				
1.1				
2.0	36.000	12.000	35.000	
3.0			39.000	

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstygde rel. luft	GOR [m3/m3]
1.0	765	121000	0.860		158
1.1	907	141000	0.860		155
2.0	409	889900	0.768		2176
3.0					

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
ACBL VDL GR	110	1600
ACBL VDL GR	1001	2885
ACBL VDL GR	2700	3052
CDL CNL GR CAL	1599	2925
CDL CNL GR CAL	2884	3558
CDL CNL GR CAL SP	2885	3114
CDL GR CAL	501	1627
DIFL BHC AC GR SP CAL	110	3559
DIPLOG	2440	3559
DLL ML	2600	3115
DLWD	1632	3560
FMT	2804	2902
FMT	2966	3106
VELOCITY	830	3560

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	170.0	36	175.0	0.00	LOT
SURF.COND.	20	502.0	26	520.0	1.37	LOT
INTERM.	13 3/8	1600.0	17 1/2	1630.0	1.79	LOT
INTERM.	9 5/8	2889.0	12 1/4	2926.0	1.70	LOT
LINER	7	3560.0	8 1/2	3560.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
137	1.04	130.0	24.0	WATER BASED	05.11.1984
172	1.04	44.0	16.0	WATER BASED	05.11.1984
175	1.06	48.0	16.0	WATER BASED	05.11.1984
520	1.09	42.0	13.0	WATER BASED	06.11.1984
520	1.10	41.0	13.0	WATER BASED	07.11.1984
520	1.10	41.0	13.0	WATER BASED	07.11.1984
686	1.12	49.0	11.5	WATER BASED	12.11.1984
928	1.14	51.0	11.5	WATER BASED	12.11.1984
1050	1.14	51.0	11.5	WATER BASED	12.11.1984
1225	1.15	51.0	11.5	WATER BASED	12.11.1984
1456	1.14	61.0	12.4	WATER BASED	13.11.1984
1630	1.15	62.0	12.4	WATER BASED	14.11.1984
1630	1.21	57.0	9.0	WATER BASED	19.11.1984
1630	1.21	57.0	9.0	WATER BASED	19.11.1984
1700	1.20	61.0	7.0	WATER BASED	22.11.1984
1848	1.20	64.0	9.0	WATER BASED	22.11.1984
2156	1.18	46.0	7.0	WATER BASED	23.11.1984
2555	1.20	48.0	9.0	WATER BASED	26.11.1984
2630	1.21	52.0	11.0	WATER BASED	26.11.1984
2656	1.21	47.0	11.0	WATER BASED	27.11.1984
2757	1.20	46.0	9.6	WATER BASED	29.11.1984
2870	1.20	44.0	9.0	WATER BASED	30.11.1984
2926	1.35	45.0	7.7	WATER BASED	03.12.1984
2968	1.45			WATER BASED	11.12.1984
3021	1.45	54.0	6.0	WATER BASED	25.01.1985
3066	1.35	60.0	6.0	WATER BASED	02.01.1985
3117	1.40	57.0	6.0	WATER BASED	17.12.1984



3454	1.40	54.0	7.2	WATER BASED	27.12.1984
3560	1.38	53.0	6.2	WATER BASED	27.12.1984

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]
450_Formation_pressure_(Formasjonstrykk)	pdf	0.22

