



Generell informasjon

Brønnbane navn	34/8-3
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	VISUND
Funn	34/8-1 Visund
Brønn navn	34/8-3
Seismisk lokalisering	NH 8404 - 321 SP 275
Utvinningstillatelse	120
Boreoperatør	Norsk Hydro Produksjon AS
Boretillatelse	581-L
Boreinnretning	POLAR PIONEER
Boredager	63
Borestart	14.07.1988
Boreslutt	14.09.1988
Frigitt dato	14.09.1990
Publiseringsdato	21.12.2012
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	BRENT GP
Avstand, boredekk - midlere havflate [m]	23.0
Vanndybde ved midlere havflate [m]	382.0
Totalt målt dybde (MD) [m RKB]	3328.0
Totalt vertikalt dybde (TVD) [m RKB]	3320.0
Maks inklinasjon [°]	9.6
Temperatur ved bunn av brønnbanen [°C]	122
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	STATFJORD GP
Geodetisk datum	ED50
NS grader	61° 24' 28.04" N



ØV grader	2° 32' 45.06" E
NS UTM [m]	6808456.80
ØV UTM [m]	475751.35
UTM sone	31
NPDID for brønnbanen	940

Brønnhistorie

General

Well 34/8-3 was drilled on the A-structure on the Visund Field. This is a NNE-SSW oriented elongated fault block with the Pre-Cretaceous strata dipping towards WNW. The A-Central fault divides the A-structure into the A-North and A-South compartments. The primary objectives of the well were to test the hydrocarbon potential of the Brent Group on the A-North compartment. Planned TD was 50 m into the Statfjord Formation.

Operations and results

Wildcat well 34/8-3 was spudded with the semi-submersible installation Polar Pioneer on 14 July 1988 and drilled to TD at 3328 m (3320 m TVD) in the Early Jurassic Statfjord Formation. There were no problems with shallow gas. 9 5/8" casing was set at 2597 m instead of 2800 m due to higher pressure than prognosed in formation of Cretaceous age. Below 2600 m the well started to build some angle, up to 9.6 deg at the most. This resulted in 8 meter discrepancy between measured depth and vertical depth towards TD. The well was drilled with seawater and hi-vis pills down to 1302 m and with KCl/polymer mud from 1302 m to TD.

Oil shows were recorded in thin sandstone stringers in the Kyrre Formation between 2364 m and 2555 m. The Brent Group was encountered at 2837 m. It contained a 90 m gas column and a 13 m oil column. The gas/oil contact was at 2929 m. The oil/water contact could not be established, but DST 1 produced clean oil from the interval 2935 to 2947 m. Oil shows were recorded on sandstone on cores down to 2951 m.

Seven cores were cut in the interval 2839.0 to 2957.5 m in the Brent Group. The core depths are 1 m shallow compared to logger's depth. One RFT wire line fluid sample was taken at 2936 m. The 2 3/4 gallon chamber contained 9 litres water and mud filtrate, 0.6 litres oil and 0.14 Sm³ gas.

Since the oil/water contact was not found, it was decided to sidetrack. The well bore was plugged back to 845 m and permanently abandoned on 14 September 1988 as an oil and gas appraisal well.

Testing

Three drill stem tests were performed in the well.

DST 1 tested the interval from 2935 to 2947 m in the oil zone in the Rannoch Formation. It produced 68 Sm³ oil and 18200 Sm³ gas /day through a 4.76 mm (12/64") choke. The GOR was 268 Sm³/Sm³, the oil density was 0.847 g/cm³, and the gas gravity was 0.635 (air = 1) with 1 % CO₂ and 0 ppm H₂S. The bottom hole temperature was 108.9 deg C, measured at 2895.8 m.

DST 2 tested the interval from 2905 to 2921 m in the gas zone in the Rannoch Formation. It produced 613 Sm³ oil and 1540000 Sm³ gas /day through a 28.58 mm (72/64") choke. The GOR was 2520 Sm³/Sm³, the oil density was 0.0.775 g/cm³, and the gas gravity was 0.640 (air = 1) with 1.6 % CO₂ and 1 ppm H₂S. The bottom hole temperature was 110.8 deg C, measured at 2850.11 m.



DST 3 tested the interval from 2868 to 2880 m in the gas zone in the Etive Formation. It produced 554 Sm³ oil and 1540000 Sm³ gas /day through a 25.4 mm (64/64") choke. The GOR was 2780 Sm³/Sm³, the oil density was 0.782 g/cm³, and the gas gravity was 0.648 (air = 1) with 1.5 % CO₂ and 1 ppm H₂S. The bottom hole temperature was 110.4 deg C, measured at 2825.56 m.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1320.00	3327.00

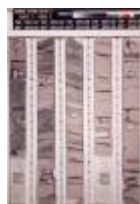
Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2839.0	2849.0	[m]
2	2849.0	2871.0	[m]
3	2871.0	2895.0	[m]
4	2895.0	2898.5	[m]
5	2899.0	2927.0	[m]
6	2927.0	2946.0	[m]
7	2946.0	2957.1	[m]

Total kjerneprøve lengde [m]	117.6
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder





2839-2843m 2846-2851m 2851-2856m 2856-2861m 2861-2866m



2866-2873m



2873-2878m



2878-2883m



2878-2883m



2883-2888m



2888-2893m



2893-2897m



2898-2903m



2903-2908m



2908-2913m



2913-2918m



2923-2927m



2918-2923m



2927-2932m



2932-2937m



2937-2942m



2942-2947m



2947-2953m



2953-2957m

Palynologiske preparater i Sjøkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
2641.0	[m]	SWC	HYDRO
2690.0	[m]	SWC	HYDRO
2733.0	[m]	SWC	HYDRO
2770.0	[m]	SWC	HYDRO
2810.0	[m]	DC	HYDRO
2820.0	[m]	DC	HYDRO
2824.0	[m]	SWC	HYDRO



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 15.5.2024 - 12:32

2827.5	[m]	SWC	HYDRO
2828.0	[m]	SWC	HYDRO
2835.0	[m]	SWC	HYDRO
2837.0	[m]	SWC	HYDRO
2839.0	[m]	C	HYDRO
2839.9	[m]	C	HYDRO
2840.0	[m]	DC	HYDRO
2842.0	[m]	C	HYDRO
2852.0	[m]	C	HYDRO
2852.5	[m]	C	HYDRO
2855.0	[m]	DC	HYDRO
2855.1	[m]	C	HYDRO
2860.9	[m]	C	HYDRO
2861.0	[m]	C	HYDRO
2866.0	[m]	C	HYDRO
2876.2	[m]	C	HYDRO
2880.3	[m]	C	HYDRO
2931.0	[m]	C	HYDRO
2931.0	[m]	C	HYDRO
2933.4	[m]	C	HYDRO
2934.0	[m]	C	HYDRO
2935.2	[m]	C	HYDRO
2942.1	[m]	C	HYDRO
2947.0	[m]	C	HYDRO
2952.4	[m]	C	HYDRO
2955.0	[m]	DC	HYDRO
2956.8	[m]	C	HYDRO
2957.2	[m]	C	HYDRO
2962.0	[m]	DC	HYDRO
2970.0	[m]	DC	HYDRO
2985.0	[m]	DC	HYDRO
2995.7	[m]	SWC	HYDRO
2997.5	[m]	SWC	HYDRO
3000.0	[m]	DC	HYDRO
3015.0	[m]	DC	HYDRO
3030.0	[m]	SWC	HYDRO
3034.0	[m]	SWC	HYDRO
3045.5	[m]	SWC	HYDRO
3075.0	[m]	SWC	HYDRO
3128.0	[m]	SWC	HYDRO



3155.0	[m]	SWC	HYDRO
3165.0	[m]	SWC	HYDRO
3180.0	[m]	SWC	HYDRO
3220.0	[m]	SWC	HYDRO
3273.0	[m]	SWC	HYDRO
3277.0	[m]	SWC	HYDRO

Oljeprøver i Sokkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST		0.00	0.00			YES
DST	TEST1	2935.00	2947.00		18.08.1988 - 00:00	YES
DST	DST2	2905.00	2921.00		30.08.1988 - 00:00	YES
DST	DST3	2868.00	2880.00	CONDE NSATE	08.09.1988 - 00:00	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
405	NORDLAND GP
1119	UTSIRA FM
1175	HORDALAND GP
1820	ROGALAND GP
1820	BALDER FM
1862	LISTA FM
2012	SHETLAND GP
2012	JORSALFARE FM
2300	KYRRE FM
2795	CROMER KNOLL GP
2827	VIKING GP
2827	DRAUPNE FM
2837	BRENT GP
2837	NESS FM
2867	ETIVE FM
2897	RANNOCH FM



2964	BROOM FM
2965	DUNLIN GP
2965	DRAKE FM
3007	COOK FM
3118	BURTON FM
3155	AMUNDSEN FM
3278	STATFJORD GP

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
940_GCH_1	pdf	0.58

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
940_02_WDSS_completion_log	pdf	0.22

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
940_34_8_3_Completion_log	pdf	5.06
940_34_8_3_Completion_report	pdf	15.67

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	2935	2947	4.8
2.0	2905	2921	28.6
3.0	2868	2880	25.4





Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				109
2.0				110
3.0				110

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstygde rel. luft	GOR [m3/m3]
1.0	68	18200	0.847	0.635	268
2.0	613	1540000	0.775	0.640	2520
3.0	554	1540000	0.782	0.648	2776

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
AMS	2597	3328
CBL VDL	1200	3232
CST GR	2733	3306
DIL LSS GR SP	1090	3328
DLL MSFL	2597	3328
LDL CNL	1090	3328
MWD	402	2838
NGS	2597	3328
RFT	2842	3302
SHDT	2597	3312
VSP	800	3230

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	491.0	36	970.0	0.00	LOT
INTERM.	13 3/8	1302.0	17 1/2	1317.0	1.63	LOT
INTERM.	9 5/8	2598.0	12 1/4	2622.0	1.86	LOT
LINER	7	3312.0	8 1/2	3328.0	0.00	LOT



Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
419	1.03			WATER BASED	15.07.1988
482	1.03			WATER BASED	19.07.1988
491	1.03			WATER BASED	19.07.1988
970	1.03			WATER BASED	19.07.1988
1317	1.03			WATER BASED	19.07.1988
1317	1.03			WATER BASED	21.07.1988
1317	1.20	15.0	8.0	WATER BASED	27.07.1988
1864	1.36	22.0	13.0	WATER BASED	27.07.1988
2312	1.41	26.0	16.0	WATER BASED	27.07.1988
2390	1.52	19.0	6.0	WATER BASED	13.09.1988
2390	1.52	20.0	8.0	WATER BASED	14.09.1988
2390	1.52	20.0	8.0	WATER BASED	15.09.1988
2469	1.46	24.0	9.0	WATER BASED	27.07.1988
2622	1.52	26.0	8.0	WATER BASED	27.07.1988
2622	1.52	25.0	8.0	WATER BASED	27.07.1988
2622	1.52	25.0	8.0	WATER BASED	28.07.1988
2627	1.52	20.0	6.0	WATER BASED	01.08.1988
2749	1.52	24.0	8.0	WATER BASED	01.08.1988
2839	1.60	25.0	8.0	WATER BASED	01.08.1988
2870	1.60	23.0	6.0	WATER BASED	01.08.1988
2897	1.70	24.0	8.0	WATER BASED	09.09.1988
2897	1.70	25.0	8.0	WATER BASED	08.09.1988
2933	1.70	24.0	9.0	WATER BASED	02.09.1988
2933	1.70	24.0	9.0	WATER BASED	05.09.1988
2933	1.70	25.0	9.0	WATER BASED	06.09.1988
2933	1.70	24.0	8.0	WATER BASED	07.09.1988
2957	1.60	24.0	6.0	WATER BASED	04.08.1988
2992	1.60	23.0	7.0	WATER BASED	08.08.1988
3066	1.60	21.0	7.0	WATER BASED	08.08.1988
3169	1.60	24.0	7.0	WATER BASED	08.08.1988
3216	1.60	24.0	8.0	WATER BASED	08.08.1988
3264	1.60	22.0	10.0	WATER BASED	09.08.1988
3316	1.66	25.0	9.0	WATER BASED	23.08.1988
3316	1.66	21.0	10.0	WATER BASED	23.08.1988
3316	1.70	25.0	9.0	WATER BASED	30.08.1988
3316	1.70	24.0	9.0	WATER BASED	31.08.1988



3316	1.66	25.0	10.0	WATER BASED	19.08.1988
3316	1.66	24.0	10.0	WATER BASED	19.08.1988
3316	1.69	24.0	9.0	WATER BASED	25.08.1988
3316	1.69	24.0	9.0	WATER BASED	26.08.1988
3316	1.69	24.0	9.0	WATER BASED	29.08.1988
3316	1.70	24.0	9.0	WATER BASED	30.08.1988
3328	1.60	23.0	9.0	WATER BASED	15.08.1988
3328	1.60	23.0	9.0	WATER BASED	10.08.1988
3328	1.60	23.0	9.0	WATER BASED	11.08.1988
3328	1.60	24.0	9.0	WATER BASED	12.08.1988
3328	1.66	29.0	6.0	WATER BASED	15.08.1988
3328	1.66	29.0	7.0	WATER BASED	15.08.1988
3328	1.66	29.0	10.0	WATER BASED	16.08.1988

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]
940_Formation_pressure_(Formasjonstrykk)	pdf	0.22

