



Generell informasjon

Brønnbane navn	25/1-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	FRIGG
Funn	25/1-1 Frigg
Brønn navn	25/1-1
Seismisk lokalisering	line 69205-SP 162
Utvinningstillatelse	024
Boreoperatør	Elf Petroleum Norge AS
Boretillatelse	53-L
Boreinnretning	PENTAGONE 81
Boredager	115
Borestart	30.03.1971
Boreslutt	22.07.1971
Frigitt dato	22.07.1973
Publiseringsdato	26.05.2009
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	EOCENE
1. nivå med hydrokarboner, formasjon.	FRIGG FM
Avstand, boredekk - midlere havflate [m]	24.0
Vanndybde ved midlere havflate [m]	101.0
Totalt målt dybde (MD) [m RKB]	4570.0
Maks inklinasjon [°]	4.2
Temperatur ved bunn av brønnbanen [°C]	98
Eldste penetrerte alder	MIDDLE JURASSIC
Eldste penetrerte formasjon	HUGIN FM
Geodetisk datum	ED50
NS grader	59° 53' 17.4" N
ØV grader	2° 4' 42.7" E
NS UTM [m]	6639470.41



ØV UTM [m]	448427.57
UTM sone	31
NPDID for brønnbanen	190

Brønnhistorie

General

Well 25/1-1 was drilled in the middle of block 25/1 in the Viking Graben, close to the UK border. Seismic surveys had defined structural closure at several levels in Mesozoic and into lower Tertiary horizons. At Paleocene level an "amoeboid" feature extending as much as 350 km² with a vertical closure of 180 m was mapped. The primary objective of the well was to test the hydrocarbon potential of the Early Tertiary, interpreted to be a deltaic sand build-up. Secondary objective was Jurassic sandstones.

The well is Type Well for the Frigg, Svarte, Blodøks, Tryggvason, Kyrre, and Jorsalfare Formations.

Operations and results

Wildcat well 25/1-1 was spudded with the semi-submersible installation Pentagone 81 on 30 March 1971 and drilled to TD at 4570 m in Middle Jurassic Hugin Formation. The well was drilled with a seawater/LFC mud system down to TD.

Apart from sandy sections in the Nordland Group, the lithology down to top Frigg Formation at 1836 m was mainly claystones. The Frigg Formation sandstones had porosities in the range 30 to 40% with permeabilities of several Darcy. It was hydrocarbon bearing with a gas/oil contact at 1972 m, and an oil/water contact at 1992 m. Further shows were seen in a thin sand at 2470 m in the Lista Formation. An FIT sample recovered a small amount of oil from this sand. Oil shows were also recorded on limestone on core K5 in the Jorsalfare Formation. The Jurassic sequence penetrated by the well was mainly shales of the Viking Group and only 10 m of Hugin Formation sand at TD. No shows were reported from the Hugin Formation.

Six conventional cores were cut. Cores K1 to K3 were cut from 1868 to 1910 m in the Frigg Formation. K4 was cut from 2687 to 2696 m in the lower Lista Formation, while K5 and K6 were cut from 2826 to 2843 m and from 2993 m to 2997.5 m in the Jorsalfare Formation. Wire line fluid sampling was attempted at nine different depths. Hydrocarbon fluids were recovered from four levels: 1893 m (gas and filtrate), 1927.5 m (gas and filtrate), 1973.5 m (gas, filtrate and a small amount of oil), and 2471 m (filtrate and a small amount of oil).

The well was permanently abandoned on 22 July 1971 as an oil and gas discovery.

Testing

A production test was carried through perforations between 1920 and 1928 m on gas bearing Frigg Formation sands. The test produced 674000 Sm³ gas /day.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1120.00	4558.00



Borekaks tilgjengelig for prøvetaking?	NO
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Borekjerne i Sakkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1871.0	1877.0	[m]
2	1891.5	1895.0	[m]
3	1900.0	1910.0	[m]
4	2687.0	2696.0	[m]
5	2826.0	2843.1	[m]
6	2993.0	2997.5	[m]

Total kjerneprøve lengde [m]	50.1
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sakkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1360.0	[m]	DC	
1370.0	[m]	DC	
1430.0	[m]	DC	
1450.0	[m]	DC	
1490.0	[m]	DC	
1500.0	[m]	DC	
1780.0	[m]	DC	
1790.0	[m]	DC	
1830.0	[m]	DC	
1840.0	[m]	DC	
1876.0	[m]	C	IGS
2126.0	[m]	DC	
2140.0	[m]	DC	
2225.0	[m]	DC	
2245.0	[m]	DC	
2426.0	[m]	DC	
2445.0	[m]	DC	
2465.0	[m]	DC	
2526.0	[m]	DC	
2541.0	[m]	DC	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 17.5.2024 - 08:01

2601.0	[m]	DC	OD
2622.0	[m]	DC	OD
2640.0	[m]	DC	OD
2640.0	[m]	DC	
2657.0	[m]	DC	OD
2665.0	[m]	DC	
2679.0	[m]	DC	OD
2682.0	[m]	DC	
2690.0	[m]	C	IGS
2691.1	[m]	C	OD
2694.7	[m]	C	OD
2695.0	[m]	C	IGS
2720.0	[m]	DC	OD
2723.0	[m]	DC	
2740.0	[m]	DC	OD
2760.0	[m]	DC	OD
2778.0	[m]	DC	OD
2800.0	[m]	DC	OD
2829.3	[m]	C	OD
2830.1	[m]	C	OD
2831.9	[m]	C	OD
2833.7	[m]	C	OD
2835.5	[m]	C	OD
2837.3	[m]	C	OD
2839.1	[m]	C	OD
2840.9	[m]	C	OD
2842.7	[m]	C	OD
2860.0	[m]	DC	OD
2874.0	[m]	DC	OD
2882.0	[m]	DC	OD
2993.5	[m]	C	OD
2996.2	[m]	C	OD
3012.0	[m]	DC	OD
3039.0	[m]	DC	OD
3071.0	[m]	DC	OD
3103.0	[m]	DC	OD
3146.0	[m]	DC	OD
3174.0	[m]	DC	OD
3205.0	[m]	DC	OD
3226.0	[m]	DC	OD



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 17.5.2024 - 08:01

3250.0	[m]	DC	OD
3276.0	[m]	DC	OD
3300.0	[m]	DC	OD
3327.0	[m]	DC	OD
3351.0	[m]	DC	OD
3378.0	[m]	DC	OD
3398.0	[m]	DC	OD
3426.0	[m]	DC	OD
3449.0	[m]	DC	OD
3473.0	[m]	DC	OD
3497.0	[m]	DC	OD
3501.0	[m]	DC	OD
3525.0	[m]	DC	OD
3553.0	[m]	DC	OD
3577.0	[m]	DC	OD
3601.0	[m]	DC	OD
3625.0	[m]	DC	OD
3649.0	[m]	DC	OD
3676.0	[m]	DC	OD
3696.0	[m]	DC	OD
3731.0	[m]	DC	OD
3751.0	[m]	DC	OD
3772.0	[m]	DC	OD
3800.0	[m]	DC	OD
3828.0	[m]	DC	OD
3858.0	[m]	DC	OD
3878.0	[m]	DC	OD
3900.0	[m]	DC	OD
3924.0	[m]	DC	OD
3952.0	[m]	DC	OD
3976.0	[m]	DC	OD
3996.0	[m]	DC	OD
4024.0	[m]	DC	OD
4052.0	[m]	DC	OD
4076.0	[m]	DC	OD
4100.0	[m]	DC	OD
4124.0	[m]	DC	OD
4152.0	[m]	DC	OD
4176.0	[m]	DC	OD
4196.0	[m]	DC	OD



4228.0	[m]	DC	OD
4248.0	[m]	DC	OD
4300.0	[m]	DC	OD
4356.0	[m]	DC	OD
4404.0	[m]	DC	OD
4452.0	[m]	DC	OD
4504.0	[m]	DC	OD
4524.0	[m]	DC	OD
4558.0	[m]	DC	OD

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	WATER	06.07.1971 - 00:00	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
125	NORDLAND GP
731	HORDALAND GP
1836	FRIGG FM
2115	ROGALAND GP
2115	BALDER FM
2145	INTRA BALDER FM SS
2195	HERMOD FM
2218	SELE FM
2228	HERMOD FM
2245	HEIMDAL FM
2389	LISTA FM
2711	SHETLAND GP
2711	JORSALFARE FM
2997	KYRRE FM
3582	TRYGGVASON FM
3790	BLODØKS FM
3807	SVARTE FM
3995	CROMER KNOLL GP



3995	RØDBY FM
4065	SOLA FM
4135	ÅSGARD FM
4203	VIKING GP
4203	DRAUPNE FM
4280	HEATHER FM
4560	VESTLAND GP
4560	HUGIN FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
190_1	pdf	12.04
190_2	pdf	0.61
190_3	pdf	0.60
190_4	pdf	0.29

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
190_01_WDSS_General_Information	pdf	0.16

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
190_00_25_1_1_Completion_Log	pdf	2.44
190_00_25_1_1_Completion_Report	pdf	0.52
190_00_25_1_1_Core_description_report	PDF	0.33
190_00_25_1_1_Core_Photos	PDF	60.60
190_00_25_1_1_FIT_1_Test_report	PDF	0.66
190_00_25_1_1_Geochemical_report	PDF	20.81
190_00_25_1_1_Lithology	PDF	0.34
190_00_25_1_1_Micro_paleontology_report	PDF	4.79
190_00_25_1_1_Paleontology_report	PDF	3.51
190_00_25_1_1_Rock_evaluation	PDF	1.11
190_00_25_1_1_Sampling_Test_report	PDF	0.70





190 00 25 1 1 Sedimentology report	PDF	3.62
190 00 25 1 1 Synthetic Seismograms	PDF	1.34
190 00 25 1 1 Well log Study	PDF	2.83

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	1920	1928	0.0

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningsstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstygde rel. luft	GOR [m3/m3]
1.0		674000			

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
BHC GR	459	4453
CBL	350	4063
CBL GR	1200	2947
DLL	1835	4140
FDC GR	1835	2850
HDT	1835	4059
HRT	1000	2920
IES	460	2100
ML MLL	1835	2855
SNP	1835	2850
SRS	459	4453

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	165.0	36	165.0	0.00	LOT
SURF.COND.	20	459.0	26	490.0	0.00	LOT
INTERM.	13 3/8	1835.0	17 1/2	1846.0	0.00	LOT
INTERM.	9 5/8	2950.0	12 1/4	2960.0	0.00	LOT
PROD.	7	4062.0	8 1/2	4063.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
0	1.68	65.0		waterbased	
490	1.25	65.0		waterbased	
1846	1.30	60.0		waterbased	
2371	1.25	44.0		waterbased	
3195	1.65	56.0		waterbased	
4029	1.68	65.0		waterbased	
4455	1.90	60.0		waterbased	

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]
190 Formation pressure (Formasjonstrykk)	pdf	0.21

