



Generell informasjon

Brønnbane navn	30/10-2
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	ODIN
Funn	30/10-2 Odin
Brønn navn	30/10-2
Seismisk lokalisering	LINE CS 131 SP.26575
Utvinningstillatelse	030
Boreoperatør	Esso Exploration and Production Norway A/S
Boretillatelse	102-L
Boreinnretning	DRILLMASTER
Boredager	95
Borestart	24.12.1973
Boreslutt	28.03.1974
Frigitt dato	28.03.1976
Publiseringsdato	29.06.2004
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	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]	104.0
Totalt målt dybde (MD) [m RKB]	2755.0
Temperatur ved bunn av brønnbanen [°C]	77
Eldste penetrerte alder	LATE CRETACEOUS
Eldste penetrerte formasjon	HARDRÅDE FM
Geodetisk datum	ED50
NS grader	60° 4' 58.87" N
ØV grader	2° 9' 42.76" E
NS UTM [m]	6661108.48



ØV UTM [m]	453367.16
UTM sone	31
NPDID for brønnbanen	392

Brønnhistorie

General

Well 30/10-2 was the discovery well for the Odin field, located North of the Frigg Field. The primary objective of the well were to evaluate the Early Eocene sands ("Frigg Field Clastic Tongue") predicted at 1954 m. Secondary objectives were to evaluate the Paleocene sands and the Danian / Late Cretaceous limestone prognosed from ca 2187 m to ca 2713 m.

Operations and results

Exploration well 30/10 2 was spudded with the semi-submersible installation Drillmaster on 24 December 1973 and drilled to TD at 2755 m in Late Cretaceous (Maastrichtian) Hardråde Formation. The mud programme used was a seawater/Lignosulphonate system. Some drilling problems were encountered due to shale cavings. After drilling to 2026 m it was necessary to condition the hole several days due to caving shales. While drilling at 2147 m three cones were lost in the hole and when attempting to recover these, six feet of the bottom drilling string was left in the hole. The fish was recovered after several attempts. Later after setting 9 5/8" casing the hole was drilled to TD with some minor shale caving problems.

The Late Cretaceous consisted primarily of interbedded tight micritic limestone and shale. No reservoir beds were present and no significant shows were recorded. However, traces of dead oil were noted between 2722 m and 2743 m (Ekofisk Formation). The Danian section consisted of detrital and skeletal limestone. No reservoir beds were noted and no shows recorded. The Paleocene contained 235 m of potential sandstone reservoirs. The sands were water wet and no significant shows were recorded. However traces of dead oil was again noted in an upper massive sand and in silty shales (Lista Formation) from 2457 m to 2472 m and from 2527 m to 2594 m. The Eocene section contained a good sand reservoir (Frigg Formation) from 1997 m to 2067 m. The formation was gas-filled down to 2048 m. The sand is white, medium to coarse grained, fine to very fine grained, medium sorted, unconsolidated, friable, sub angular grains, slightly micaceous with streaks of argillaceous very fine-grained silty sand. Good gas shows were present. The Oligocene section consisted of unconsolidated sand, siltstones and clays. The upper portion contained good shallow reservoir sand. No shows were recorded. Two conventional cores were cut from the interval 2023 m to 2027 m in the Frigg Formation. No wire line samples were taken.

The well was permanently abandoned as gas discovery on 28 March 1974.

Testing

Production test between 2023 m and 2026 m produced an average of 442000 Sm³ gas per day on a 43/64" choke.

Borekaks i Sokkeldirektoratet



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
171.90	2754.48

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	6638.0	6643.0	[ft]
2	6643.0	6648.0	[ft]

Total kjerneprøve lengde [m]	3.0
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1980.0	[ft]	DC	
2070.0	[ft]	DC	
2160.0	[ft]	DC	
2250.0	[ft]	DC	
2340.0	[ft]	DC	
2430.0	[ft]	DC	
2520.0	[ft]	DC	
2610.0	[ft]	DC	
2700.0	[ft]	DC	
2790.0	[ft]	DC	
2850.0	[ft]	DC	
2910.0	[ft]	DC	
3000.0	[ft]	DC	
3090.0	[ft]	DC	
3180.0	[ft]	DC	
3270.0	[ft]	DC	
3360.0	[ft]	DC	
3450.0	[ft]	DC	
3540.0	[ft]	DC	
3630.0	[ft]	DC	
3730.0	[ft]	DC	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 9.5.2024 - 22:15

3820.0	[ft]	DC	
3910.0	[ft]	DC	
3940.0	[m]	DC	GEOCH
4000.0	[ft]	DC	
4030.0	[ft]	DC	GEOCH
4090.0	[ft]	DC	
4120.0	[ft]	DC	RRI
4120.0	[ft]	DC	GEOCH
4180.0	[ft]	DC	
4210.0	[ft]	DC	GEOCH
4270.0	[ft]	DC	
4300.0	[ft]	DC	RRI
4300.0	[ft]	DC	GEOCH
4330.0	[ft]	DC	
4390.0	[ft]	DC	GEOCH
4400.0	[ft]	SWC	
4420.0	[ft]	DC	
4450.0	[ft]	DC	RRI
4480.0	[ft]	DC	GEOCH
4510.0	[ft]	DC	
4570.0	[ft]	DC	GEOCH
4600.0	[ft]	DC	RRI
4600.0	[ft]	DC	
4660.0	[ft]	DC	GEOCH
4690.0	[ft]	DC	
4750.0	[ft]	DC	RRI
4750.0	[ft]	DC	GEOCH
4780.0	[ft]	DC	
4840.0	[ft]	DC	GEOCH
4870.0	[ft]	DC	
4900.0	[ft]	DC	RRI
4930.0	[ft]	DC	GEOCH
4960.0	[ft]	DC	
4960.0	[ft]	DC	
5020.0	[ft]	DC	GEOCH
5050.0	[ft]	DC	
5050.0	[ft]	DC	RRI
5110.0	[ft]	DC	GEOCH
5140.0	[ft]	DC	
5170.0	[ft]	DC	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 9.5.2024 - 22:15

5200.0 [ft]	DC	GEOCH
5230.0 [ft]	DC	
5290.0 [ft]	DC	RRI
5290.0 [ft]	DC	GEOCH
5320.0 [ft]	DC	
5380.0 [ft]	DC	GEOCH
5410.0 [ft]	DC	
5440.0 [ft]	DC	RRI
5470.0 [ft]	DC	GEOCH
5500.0 [ft]	DC	
5530.0 [ft]	DC	
5560.0 [ft]	DC	GEOCH
5590.0 [ft]	DC	
5620.0 [ft]	DC	RRI
5650.0 [ft]	DC	GEOCH
5680.0 [ft]	DC	
5740.0 [ft]	DC	GEOCH
5770.0 [ft]	DC	RRI
5770.0 [ft]	DC	
5830.0 [ft]	DC	GEOCH
5860.0 [ft]	DC	
5920.0 [ft]	DC	RRI
5920.0 [ft]	DC	GEOCH
5950.0 [ft]	DC	
6010.0 [ft]	DC	GEOCH
6040.0 [ft]	DC	
6100.0 [ft]	DC	GEOCH
6130.0 [ft]	DC	
6190.0 [ft]	DC	GEOCH
6220.0 [ft]	DC	
6280.0 [ft]	DC	
6280.0 [ft]	DC	GEOCH
6310.0 [ft]	DC	
6370.0 [ft]	DC	GEOCH
6400.0 [ft]	DC	
6460.0 [ft]	DC	GEOCH
6490.0 [ft]	DC	
6550.0 [ft]	DC	GEOCH
6580.0 [ft]	DC	
6640.0 [ft]	DC	GEOCH



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 9.5.2024 - 22:15

6678.0	[ft]	DC	
6720.0	[ft]	DC	
6760.0	[ft]	DC	
6820.0	[ft]	DC	
6820.0	[ft]	DC	GEOCH
6860.0	[ft]	DC	
6878.0	[ft]	SWC	
6878.0	[ft]	SWC	
6910.0	[ft]	DC	GEOCH
6919.0	[ft]	SWC	
6940.0	[ft]	DC	
6948.0	[ft]	SWC	
6978.0	[ft]	SWC	
7000.0	[ft]	DC	GEOCH
7009.0	[ft]	SWC	
7040.0	[ft]	DC	
7090.0	[ft]	DC	GEOCH
7140.0	[ft]	DC	
7150.0	[ft]	DC	RRI
7180.0	[ft]	DC	GEOCH
7200.0	[ft]	SWC	
7220.0	[ft]	DC	RRI
7240.0	[ft]	DC	
7260.0	[ft]	DC	RRI
7270.0	[ft]	DC	GEOCH
7320.0	[ft]	DC	RRI
7340.0	[ft]	DC	
7360.0	[ft]	DC	GEOCH
7420.0	[ft]	DC	RRI
7440.0	[ft]	DC	
7450.0	[ft]	DC	GEOCH
7500.0	[ft]	DC	RRI
7502.0	[ft]	SWC	
7540.0	[ft]	DC	
7540.0	[ft]	DC	GEOCH
7600.0	[ft]	DC	
7620.0	[ft]	DC	RRI
7630.0	[ft]	DC	GEOCH
7710.0	[ft]	DC	RRI
7720.0	[ft]	DC	GEOCH



7810.0 [ft]	DC	RRI
7810.0 [ft]	DC	GEOCH
7900.0 [ft]	DC	GEOCH
7930.0 [ft]	DC	RRI
7940.0 [ft]	DC	
7990.0 [ft]	DC	GEOCH
8000.0 [ft]	DC	RRI
8040.0 [ft]	DC	
8070.0 [ft]	DC	RRI
8080.0 [ft]	DC	GEOCH
8140.0 [ft]	DC	RRI
8140.0 [ft]	DC	
8170.0 [ft]	DC	GEOCH
8190.0 [ft]	DC	RRI
8210.0 [ft]	DC	RRI
8250.0 [ft]	DC	
8260.0 [ft]	DC	GEOCH
8280.0 [ft]	DC	RRI
8306.0 [ft]	SWC	
8340.0 [ft]	DC	
8350.0 [ft]	DC	RRI
8350.0 [ft]	DC	GEOCH
8420.0 [ft]	DC	RRI
8440.0 [ft]	DC	GEOCH
8440.0 [ft]	DC	
8490.0 [ft]	DC	RRI
8530.0 [ft]	DC	GEOCH
8540.0 [ft]	DC	
8560.0 [ft]	DC	RRI
8620.0 [ft]	DC	GEOCH
8630.0 [ft]	DC	RRI
8640.0 [ft]	DC	
8700.0 [ft]	DC	RRI
8710.0 [ft]	DC	GEOCH
8740.0 [ft]	DC	
8800.0 [ft]	DC	GEOCH
8840.0 [ft]	DC	
8860.0 [ft]	DC	GEOCH
8920.0 [ft]	DC	GEOCH
8940.0 [ft]	DC	



9010.0	[ft]	DC	GEOCH
9030.0	[ft]	DC	

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
128	NORDLAND GP
374	UTSIRA FM
914	HORDALAND GP
1997	FRIGG FM
2067	ROGALAND GP
2067	BALDER FM
2129	SELE FM
2189	HERMOD FM
2256	LISTA FM
2269	HEIMDAL FM
2414	LISTA FM
2637	VÅLE FM
2653	SHETLAND GP
2653	EKOFISK FM
2691	HARDRÅDE FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
392	pdf	0.33

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
392 1 Source characteristics of canned cuttings from the 30 10 2 well	pdf	0.75
392 2 Geochemical characterization of the oil under the gas	pdf	0.15

Dokumenter - eldre Sjøkeldirektoratets WDSS rapporter og andre relaterte dokumenter





Dokument navn	Dokument format	Dokument størrelse [KB]
392_01_WDSS_General_Information	pdf	0.26

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
392_1_Completion_Report	pdf	4.91

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	2023	2026	16.5

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0	20.800	20.300		

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstygde rel. luft	GOR [m3/m3]
1.0		44995		0.585	

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
BHC SON GR COL	370	2755
CCL PERF	1936	2048
CCL PERF	2023	2026
CNL	1890	2075
FDC CNL	1947	2755
HDT	1950	2438
TEMP	1219	2107
VSP	307	2754





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	166.0	36	166.0	0.00	LOT
INTERM.	20	371.0	26	389.0	0.00	LOT
INTERM.	13 3/8	1105.0	17 1/2	1120.0	0.00	LOT
INTERM.	9 5/8	2135.0	12 1/4	2150.0	0.00	LOT
OPEN HOLE		2755.0	8 1/2	2755.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Fløtegrense [Pa]	Type slam	Dato, måling
243	1.22			water based	
1911	1.17			water based	
2072	1.31			water based	
2134	1.31			water based	
2315	1.23			water based	
2659	1.29			water based	
2754	1.31			water based	