



Generell informasjon

Brønnbane navn	8/3-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	8/3-1
Seismisk lokalisering	
Utvinningstillatelse	003
Boreoperatør	Esso Exploration and Production Norway A/S
Boretillatelse	1-L
Boreinnretning	OCEAN TRAVELER
Boredager	84
Borestart	19.07.1966
Boreslutt	10.10.1966
Frigitt dato	10.10.1968
Publiseringsdato	22.04.2005
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	26.0
Vanndybde ved midlere havflate [m]	94.0
Totalt målt dybde (MD) [m RKB]	3015.0
Temperatur ved bunn av brønnbanen [°C]	77
Eldste penetrerte alder	PRE-DEVONIAN
Eldste penetrerte formasjon	BASEMENT
Geodetisk datum	ED50
NS grader	57° 59' 13.16" N
ØV grader	3° 40' 13.29" E
NS UTM [m]	6427604.28
ØV UTM [m]	539640.29
UTM sone	31
NPDID for brønnbanen	142



Brønnhistorie

General

Wildcat well 8/3-1 was the first exploration well to be drilled in Norwegian waters. The chosen location was northwestern part of the Danish Norwegian. The well was proposed to investigate the largely unknown stratigraphic sequence and lithologies in a virgin area on an attractive, representative seismic structure. Although the seismic feature was based on low-density reconnaissance control, the structure qualified for testing in terms of vertical and areal closure and inferred thickness of sediments. The well site location was thought to lie on the east flank of the Tertiary "Viking" basin, but on the west flank of a Mesozoic sub basin. The position and delineation of older basins was uncertain, although Permian? salts of sufficient thickness to flow were recognized as probably present at depth. Interpretation of data from a seismic grid with about 7 Km line spacing indicated a regionally high, west-dipping, normally faulted block to be present. The well location was sited near the crest of the highest step faulted block. A diapiric Zechstein? salt plug was interpreted to be present, to the east on the down side of the principal fault block. The salt could have partially intruded along the fault plane, up through the Kimmerian horizon."

Operations and results

Well 8/3-1 was spudded with the semi-submersible installation Ocean Traveller on 19 July 1966 and drilled to TD at 3015 m in Caledonian schists. While pulling out of the hole to pick up a core barrel at a depth of 2961 m the pipe stuck at 1660 m, and was pumped free with seawater. The hole began caving immediately. Extensive caving over the interval 1320 m to 2030 m lead to bridging, stuck pipe, and logging problems. Eighteen rig-days were spent to cure the problems by reaming and raising the mud weight and to log the section in various logging attempts. The hole was eventually cased to 2963 m. No further problems developed. From sea bed to 277 m the initial drilling was with seawater and gel without casing. Below 277 m to approximately 2290 m a sea water slurry with Spersene, XP-2, and 0-12% diesel oil was used. At 2284 m a salt section was reached and the drilling fluid was converted to a salt saturated mud.

The lithology in the upper 1/3 was strongly dominated by shales and clays, followed by chalk and shales in the middle 1/3. The lower 1/3, below top Permian at 2205 m (Zechstein Group) the lithology was dominated by evaporites. The well drilled through the evaporites and 50 m into the basement. A minor part of the column consisted of sands, and sandstones interbedded with shale and clays. Potential reservoir rocks with sufficient porosity to be attractive were present in the Danian chalk section (Ekofisk Formation) and in the Middle Jurassic sands (Sandnes Formation). No oil or gas shows were recorded in the well. Organic geochemical analyses of cuttings showed low TOC throughout the Cretaceous. TOC rose to 2.5 % to 5 % in the Late Jurassic section (around the level of the Tau Formation). Hydrogen indexes in this section were in the range 100 to 250 mg HC/g TOC. Maturity is evaluated as top oil window somewhere between 2500 m and 3000 m (%Ro = 0.5).

Hence, reservoirs, cap rocks and potential source rock were confirmed although no hydrocarbons were found in this first well. Five conventional and 19 sidewall cores were taken in the well. A quarter section cut of the conventional cores is stored at the Directorate. The length of the cores range from 4 to 10 m and the recoveries were from 40 % to 100 %. The sidewall cores were taken in the 2963 - 3004 m interval. These were not deposited with the Directorate. Storing a quarter of all conventional cores at the Norwegian Petroleum Directorate (but no sidewall cores) has since been standard NPD practice.

No wire line tests were conducted and therefore no fluid samples taken, due to the caving problems in the hole.



The well was permanently abandoned on 10 October 1966 as a dry hole.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
287.00	2996.00

Borekaks tilgjengelig for prøvetaking?	NO
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2075.0	2075.5	[m]
2	2079.0	2083.0	[m]
3	2206.0	2214.8	[m]
4	2968.4	2972.0	[m]
5	3007.0	3015.0	[m]

Total kjerneprøve lengde [m]	24.9
Kjerne tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
449.0	[m]	DC	
479.0	[m]	DC	
509.0	[m]	DC	
539.0	[m]	DC	
575.0	[m]	DC	
608.0	[m]	DC	
638.0	[m]	DC	
662.0	[m]	DC	
685.0	[m]	DC	
690.0	[m]	DC	
715.0	[m]	DC	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 15.5.2024 - 10:23

720.0	[m]	DC	
745.0	[m]	DC	
750.0	[m]	DC	
775.0	[m]	DC	
780.0	[m]	DC	
785.0	[m]	DC	
795.0	[m]	DC	
805.0	[m]	DC	
810.0	[m]	DC	
815.0	[m]	DC	
820.0	[m]	DC	
830.0	[m]	DC	
835.0	[m]	DC	
840.0	[m]	DC	
865.0	[m]	DC	
870.0	[m]	DC	
895.0	[m]	DC	
900.0	[m]	DC	
925.0	[m]	DC	
930.0	[m]	DC	
935.0	[m]	DC	
950.0	[m]	DC	
955.0	[m]	DC	
960.0	[m]	DC	
970.0	[m]	DC	
975.0	[m]	DC	
980.0	[m]	DC	
980.0	[m]	DC	
985.0	[m]	DC	
990.0	[m]	DC	
995.0	[m]	DC	
1000.0	[m]	DC	
1005.0	[m]	DC	
1015.0	[m]	DC	
1020.0	[m]	DC	
1030.0	[m]	DC	
1035.0	[m]	DC	
1045.0	[m]	DC	
1050.0	[m]	DC	
1055.0	[m]	DC	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 15.5.2024 - 10:23

1060.0 [m]	DC	
1075.0 [m]	DC	
1080.0 [m]	DC	
1085.0 [m]	DC	
1120.0 [m]	DC	
1140.0 [m]	DC	
1170.0 [m]	DC	
1315.0 [m]	DC	
1335.0 [m]	DC	
1355.0 [m]	DC	
1395.0 [m]	DC	
1415.0 [m]	DC	
1435.0 [m]	DC	
1480.0 [m]	DC	
1510.0 [m]	DC	
1525.0 [m]	DC	
1545.0 [m]	DC	
1565.0 [m]	DC	
1585.0 [m]	DC	
1620.0 [m]	DC	
1640.0 [m]	DC	
1650.0 [m]	DC	
1660.0 [m]	DC	
1680.0 [m]	DC	
1695.0 [m]	DC	
1700.0 [m]	DC	
1720.0 [m]	DC	
1740.0 [m]	DC	
1755.0 [m]	DC	
1755.0 [m]	DC	
1760.0 [m]	DC	
1780.0 [m]	DC	
1790.0 [m]	DC	
1795.0 [m]	DC	
1800.0 [m]	DC	
1820.0 [m]	DC	
1840.0 [m]	DC	
1850.0 [m]	DC	
1855.0 [m]	DC	
1860.0 [m]	DC	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 15.5.2024 - 10:23

1880.0 [m]	DC	
1900.0 [m]	DC	
1905.0 [m]	DC	
1920.0 [m]	DC	
1925.0 [m]	DC	
1930.0 [m]	DC	
1940.0 [m]	DC	
1945.0 [m]	DC	
1950.0 [m]	DC	
1960.0 [m]	DC	
1965.0 [m]	DC	
1970.0 [m]	DC	
1980.0 [m]	DC	
1985.0 [m]	DC	
1990.0 [m]	DC	
2000.0 [m]	DC	
2005.0 [m]	DC	
2010.0 [m]	DC	
2015.0 [m]	DC	
2020.0 [m]	DC	
2025.0 [m]	DC	
2030.0 [m]	DC	
2040.0 [m]	DC	
2045.0 [m]	DC	
2050.0 [m]	DC	
2060.0 [m]	DC	
2070.0 [m]	DC	
2070.0 [m]	DC	
2075.0 [m]	DC	
2075.0 [m]	C	
2075.3 [m]	C	
2076.0 [m]	DC	
2076.6 [m]	C	
2079.0 [m]	DC	
2079.1 [m]	C	
2079.2 [m]	C	
2079.4 [m]	C	
2080.1 [m]	C	
2080.2 [m]	C	
2080.3 [m]	C	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 15.5.2024 - 10:23

2080.5 [m]	C	
2080.9 [m]	C	
2081.5 [m]	C	
2082.5 [m]	C	
2082.6 [m]	C	
2083.0 [m]	C	
2085.0 [m]	DC	
2100.0 [m]	DC	
2120.0 [m]	DC	
2125.0 [m]	DC	
2150.0 [m]	DC	
2160.0 [m]	DC	
2165.0 [m]	DC	
2170.0 [m]	DC	
2180.0 [m]	DC	
2190.0 [m]	DC	
2190.0 [m]	DC	
2206.4 [m]	C	
2206.5 [m]	C	
2207.0 [m]	C	
2208.0 [m]	C	
2209.0 [m]	C	
2210.0 [m]	C	
2210.0 [m]	DC	
2211.4 [m]	C	
2212.1 [m]	C	
2212.3 [m]	C	
2212.3 [m]	C	
2216.0 [m]	DC	
2231.0 [m]	DC	
2249.0 [m]	DC	
2270.0 [m]	DC	
2282.0 [m]	DC	
2291.0 [m]	DC	
2300.0 [m]	DC	
2351.0 [m]	DC	
2369.0 [m]	DC	
2405.0 [m]	DC	
2459.0 [m]	DC	
2513.0 [m]	DC	



2567.0 [m]	DC	
2615.0 [m]	DC	
2663.0 [m]	DC	
2717.0 [m]	DC	
2765.0 [m]	DC	
2813.0 [m]	DC	
2837.0 [m]	DC	
2861.0 [m]	DC	
2885.0 [m]	DC	
2910.0 [m]	DC	
2940.0 [m]	DC	
2960.0 [m]	DC	
2963.0 [m]	DC	
2963.0 [m]	DC	
2964.0 [m]	DC	
2964.5 [m]	C	
2966.0 [m]	DC	
2969.0 [m]	DC	
2972.0 [m]	DC	
2975.0 [m]	DC	
2981.0 [m]	DC	
2987.0 [m]	DC	
2993.0 [m]	DC	

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
120	NORDLAND GP
475	HORDALAND GP
930	ROGALAND GP
930	BALDER FM
955	SELE FM
975	LISTA FM
1030	VÅLE FM
1040	SHETLAND GP
1040	EKOFISK FM
1090	TOR FM
1315	CROMER KNOLL GP
1315	ÅSGARD FM



1628	BOKNFJORD GP
1628	FLEKKEFJORD FM
1658	SAUDA FM
1831	TAU FM
1890	EGERSUND FM
2040	VESTLAND GP
2040	SANDNES FM
2113	NO GROUP DEFINED
2113	SKAGERRAK FM
2205	ZECHSTEIN GP
2965	BASEMENT

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
142	pdf	0.29

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
142_1	pdf	4.33

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
142_01_WDSS_General_Information	pdf	0.20

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
142_01_Completion_Report_and_Completion_log	pdf	3.65





Dokumenter - Sokkeldirektoratets publikasjoner

Dokument navn	Dokument format	Dokument størrelse [KB]
142_01_NPD_Paper_No.1_Lithology_Well_8_3_1.pdf	pdf	16.81
142_02_NPD_Paper_No.1_Interpreted_Lithology_log_Well_8_3_1	pdf	54.86

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
BHC SONIC	273	1100
BHC SONIC	2961	3014
CALI	1063	1880
CBL	1900	2200
CCL	1000	1140
DEV	2150	3015
GR BHC SONIC	145	277
GR BHC SONIC	1063	2958
GR NEUTRON	273	1112
GR NEUTRON	1800	3015
LL-7	273	1879
LL-7	2961	3015
ML	273	1100
SWC	2962	3004
VELOCITY	150	3016

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
SURF.COND.	30	145.0	36	174.0	0.00	LOT
INTERM.	20	274.0	26	280.0	0.00	LOT
INTERM.	13 3/8	1063.0	17 1/2	1115.0	0.00	LOT
INTERM.	9 5/8	3015.0	12 1/4	3015.0	0.00	LOT

Boreslam





Dybde MD [m]	Egenvekt, slam [g/cm ³]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
277	1.07			seawater	
1465	1.25			spersene xp	
1815	1.37			spersene xp	

Tynnslip i Sokkeldirektoratet

Dybde	Enhet
3010.00	[m]