



Generell informasjon





Brønnbane navn	16/7-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	16/7-1
Seismisk lokalisering	C 287 (i) SP: 185
Utvinningstillatelse	001
Boreoperatør	Esso Exploration and Production Norway A/S
Boretillatelse	6-L
Boreinnretning	OCEAN TRAVELER
Boredager	45
Borestart	11.08.1967
Boreslutt	24.09.1967
Frigitt dato	24.09.1969
Publiseringsdato	24.09.2004
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	26.0
Vanndybde ved midlere havflate [m]	80.0
Totalt målt dybde (MD) [m RKB]	2781.0
Totalt vertikalt dybde (TVD) [m RKB]	2726.0
Maks inklinasjon [°]	36
Temperatur ved bunn av brønnbanen [°C]	91
Eldste penetrerte alder	LATE PERMIAN
Eldste penetrerte formasjon	ZECHSTEIN GP
Geodetisk datum	ED50
NS grader	58° 20' 22.38" N
ØV grader	2° 18' 49.96" E
NS UTM [m]	6466866.76
ØV UTM [m]	459826.92
UTM sone	31
NPDID for brønnbanen	146



Brønnhistorie

General

Wildcat well 16/7-1 is located in the Ling Depression between the Utsira High and the Danish Norwegian Basin. The main objectives were to test the hydrocarbon potential of the sedimentary section and to investigate the lithology and sequence in this portion of the North Sea basin.

Operations and results

Well 16/7-1 was spudded with the semi-submersible installation Ocean Traveller on 11 August 1967 and drilled to TD at 2781 m in salt of the Late Permian Zechstein Group. Initial drilling from the sea floor to 381 m was with seawater and gel without casing. Returns were to the sea floor. Below 381 m to a depth of 2150 m, a Spersene XP-20 Lignosulphonate mud with 3% to 8% diesel oil was used. From 2150 m to TD, the mud system contained salt saturated Spersene XP-20 Lignosulphonate mud with 5% to 9% diesel oil.

After cementing the 30-inch casing at 131 m, the well was drilled to 213 m. On pulling out of the hole, it was found that the guide structure had sunk 5 m into the seabed or 2.5 m below the mud line. The ocean floor structures were retrieved and the platform was moved 30 m southwest and the well was re-spudded. The 30-inch casing was again cemented at 131 m. No abnormal drilling problems were encountered until a depth of 2150 m was reached. At this depth, high chloride and high viscosity mud indicated that salt had been encountered. The Continuous Dipmeter indicated that there was excessive natural deviation probably due to contorted bedding in the salt section. Deviation below 2225 m was calculated to increase at the rate of 1° per 15 m to a depth of 2637 m where the deviation was 27°. Extrapolating this deviation resulted in a deviation of 36° at TD. The direction of deviation at TD was 583° E. While drilling salt at 2780 m pipe stuck, and when attempting to pull free collars parted. Plug was set, and tagged at 2644 m. The hole was then logged. To avoid bad dog leg another plug was set and tagged at 2210 m. While attempting to sidetrack pipe again stuck and parted. It was then decided to abandon the hole. The pre-Zechstein section was thus not penetrated.

The well penetrated Top Cretaceous at 1856 m and top of the Late Permian Zechstein Group at 2085 m. The Jurassic and Triassic were not present. No shows were encountered in any part of well 16/7-1. One conventional core was cut from 1793 m to 1809 m in the Lista Formation. Sidewall cores were not taken. No fluid samples were taken. The well was permanently abandoned as a dry hole on 24 September 1967.

Testing

No drill stem test was performed

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1250.00	9130.00
Borekaks tilgjengelig for prøvetaking?	YES



Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1793.1	1807.8	[m]

Total kjerneprøve lengde [m]	14.6
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1.0	[unknown]	C	
3510.0	[ft]	DC	
3590.0	[ft]	DC	
3680.0	[ft]	DC	
3800.0	[ft]	DC	
3890.0	[ft]	DC	
3980.0	[ft]	DC	
4010.0	[ft]	DC	
4070.0	[ft]	DC	
4100.0	[ft]	DC	
4160.0	[ft]	DC	
4190.0	[ft]	DC	
4250.0	[ft]	DC	
4280.0	[ft]	DC	
4310.0	[ft]	DC	
4340.0	[ft]	DC	
4370.0	[ft]	DC	
4400.0	[ft]	DC	
4430.0	[ft]	DC	
4460.0	[ft]	DC	
4490.0	[ft]	DC	
4520.0	[ft]	DC	
4580.0	[ft]	DC	
4580.0	[ft]	DC	
4610.0	[ft]	DC	
4724.0	[ft]	DC	
4770.0	[ft]	DC	



4800.0 [ft]	DC	
4830.0 [ft]	DC	
4880.0 [ft]	DC	
4900.0 [ft]	DC	
4920.0 [ft]	DC	
4980.0 [ft]	DC	
5000.0 [ft]	DC	
5020.0 [ft]	DC	
5080.0 [ft]	DC	
5120.0 [ft]	DC	
5180.0 [ft]	DC	
5200.0 [ft]	DC	
5220.0 [ft]	DC	
5280.0 [ft]	DC	
5300.0 [ft]	DC	
5320.0 [ft]	DC	
5400.0 [ft]	DC	
5420.0 [ft]	DC	
5480.0 [ft]	DC	
5500.0 [ft]	DC	
5520.0 [ft]	DC	
5580.0 [ft]	DC	
5600.0 [ft]	DC	
5620.0 [ft]	DC	
5680.0 [ft]	DC	
5700.0 [ft]	DC	
5720.0 [ft]	DC	
5780.0 [ft]	DC	
5800.0 [ft]	DC	
5820.0 [ft]	DC	
5883.0 [ft]	DC	
5885.0 [ft]	DC	
5885.0 [ft]	C	
5896.0 [ft]	C	
5903.0 [ft]	DC	
5904.0 [ft]	DC	
5909.0 [ft]	DC	
5913.0 [ft]	DC	
5915.0 [ft]	C	
5915.0 [ft]	DC	



5918.0 [ft]	C	
5927.0 [ft]	C	
5931.0 [ft]	DC	
5935.0 [ft]	DC	
5960.0 [ft]	DC	
5980.0 [ft]	DC	
6000.0 [ft]	DC	
6020.0 [ft]	DC	
6060.0 [ft]	DC	
6080.0 [ft]	DC	
6100.0 [ft]	DC	
6160.0 [ft]	DC	
6200.0 [ft]	DC	
6240.0 [ft]	DC	
6400.0 [ft]	DC	
6450.0 [ft]	DC	
6500.0 [ft]	DC	
6550.0 [ft]	DC	
6590.0 [ft]	DC	
6650.0 [ft]	DC	
6700.0 [ft]	DC	
6750.0 [ft]	DC	
6790.0 [ft]	DC	
6800.0 [ft]	DC	
6820.0 [ft]	DC	
6830.0 [ft]	DC	
6840.0 [ft]	DC	
6850.0 [ft]	DC	
6850.0 [ft]	DC	
6860.0 [ft]	DC	
6870.0 [ft]	DC	
6900.0 [ft]	DC	
6940.0 [ft]	DC	
7000.0 [ft]	DC	
7040.0 [ft]	DC	
7100.0 [ft]	DC	
7140.0 [ft]	DC	
7190.0 [ft]	DC	
7200.0 [ft]	DC	
7240.0 [ft]	DC	



7340.0	[ft]	DC	
7420.0	[ft]	DC	
7540.0	[ft]	DC	
7640.0	[ft]	DC	
7740.0	[ft]	DC	
7840.0	[ft]	DC	
7940.0	[ft]	DC	
8030.0	[ft]	DC	
8120.0	[ft]	DC	
8240.0	[ft]	DC	
8340.0	[ft]	DC	
8400.0	[ft]	DC	
8440.0	[ft]	DC	
8530.0	[ft]	DC	
8620.0	[ft]	DC	
8740.0	[ft]	DC	
8830.0	[ft]	DC	
8950.0	[ft]	DC	
9040.0	[ft]	DC	
9100.0	[ft]	DC	

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
106	NORDLAND GP
808	UTSIRA FM
1017	HORDALAND GP
1670	ROGALAND GP
1670	BALDER FM
1711	SELE FM
1734	LISTA FM
1846	VÅLE FM
1856	SHETLAND GP
1856	TOR FM
1955	HOD FM
1995	CROMER KNOLL GP
1995	RØDBY FM
2016	SOLA FM
2040	ÅSGARD FM



2085 [ZECHSTEIN GP](#)

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
146	pdf	0.28

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
146 1	pdf	0.03
146 2 Geochemical analyses of canned cuttings samples from the 16 7 1 well	pdf	9.01

Dokumenter - eldre Sökkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
146 01 WDSS General Information	pdf	0.20

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
146 1 Completion Report and Completion Log	pdf	4.23

Dokumenter - Sökkeldirektoratets publikasjoner

Dokument navn	Dokument format	Dokument størrelse [KB]
146 01 NPD Paper No.6 Lithology Well 16 7 1	pdf	11.37
146 02 NPD Paper No.6 Interpreted Lithology log Well 16 7 1	pdf	46.64





Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CDM	1428	2646
DIR	1428	2647
FDC	1428	2643
GR	100	369
IES	369	1444
LL-7	1428	2630
MLL C	369	2644
SGR C	369	2630

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	131.0	36	131.0	0.00	LOT
INTERM.	13 3/8	368.0	17 1/2	381.0	0.00	LOT
INTERM.	9 5/8	1427.0	12 1/4	1440.0	0.00	LOT
OPEN HOLE		2781.0	8 1/2	2781.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
453	1.10	32.0		seawater	
625	1.10	42.0		seawater	
1059	1.14	40.0		seawater	
1440	1.14	56.0		seawater	
1911	1.19	47.0		seawater	
2092	1.29	70.0		seawater	
2150	1.36	92.0		seawater	