



Generell informasjon

Brønnbane navn	17/4-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	17/4-1
Seismisk lokalisering	LINE 5836 SP. C1325.
Utvinningstillatelse	007
Boreoperatør	Elf Petroleum Norge AS
Boretillatelse	14-L
Boreinnretning	OCEAN VIKING
Boredager	71
Borestart	17.06.1968
Boreslutt	26.08.1968
Frigitt dato	26.08.1970
Publiseringsdato	24.09.2004
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	27.0
Vanndybde ved midlere havflate [m]	105.0
Totalt målt dybde (MD) [m RKB]	3997.0
Temperatur ved bunn av brønnbanen [°C]	98
Eldste penetrerte alder	EARLY PERMIAN
Eldste penetrerte formasjon	ROTLIEGEND GP
Geodetisk datum	ED50
NS grader	58° 35' 54" N
ØV grader	3° 16' 5" E
NS UTM [m]	6495507.61
ØV UTM [m]	515580.13
UTM sone	31
NPDID for brønnbanen	153



Brønnhistorie

General

Well 17/4-1 was drilled on a NNE-SSW trending monocline in the Ling Depression between the Sele High and the Utsira High /Patch Bank ridge. The objective was to investigate the sedimentary section down to the pre-Permian, and particularly to test the hydrocarbon potential of the Mesozoic sands and Zechstein dolomites. Furthermore, Early Permian and/or pre-Permian reservoirs were to be evaluated if present.

Operations and results

Wildcat well 17/4-1 was spudded with the semi-submersible installation Ocean Viking on 15 June 1968 and drilled to TD at 3997 m in conglomerate in the Early Permian Rotliegend Group. Initial drilling to 444 m was with seawater, and the returns were to the sea floor. The 17 1/2" hole was drilled out using an LFC-LC/sea water type mud, and the 13 3/8" casing shoe was set at 1803 m. From this depth the mud system was salt saturated. The 12 1/4" hole was drilled down to 3942 m from where the hole diameter was reduced to 8 1/2". An inverted oil-base mud was used from 2900 m to TD.

Sandstones were encountered in the Jurassic and Triassic. They had medium to good porosities, but generally poor permeabilities due to calcite cement. The pre-Zechstein conglomerate was very tight with no porosity. On top of this there were nearly 1200 m of evaporites, apparently undisturbed by halokinesis. The evaporites were overlain by around 300 m of continental Triassic deposits. The Jurassic consisted of fluvial sandstones overlain by carbonaceous dark shales belonging to the Late Jurassic "hot" shale (Draupne Formation). This shale was penetrated at 2122 m and is 95 m thick in the well position. No samples of any kind was recovered from this interval, but analysis of caved cuttings believed to originate from Draupne indicated TOC in the range 2 % to 7 % with potential for oil and gas. The Draupne formation is immature in the well. The Early Cretaceous marine, low energy shales range in age from Hauterivian to Albian, and they reflect deposition in a subsiding basin. There were approximately 280 m of Late Cretaceous carbonates which were deposited in an open marine environment. Deposition of lime muds probably terminated at the end of the Cretaceous, and the Tertiary is mostly represented by low energy marine sediments. A shoaling of the water in Neogene time resulted in shallow marine conditions where both sand and clay were deposited.

Minor gas shows were recorded while drilling the Tertiary section and the Late Jurassic Draupne Formation. Two conventional cores were cut. The first in the interval 2271 m to 2288 m in the Vestland Group, and the second in the interval 3881.5 m to 3884 m in the Rotliegend Group. No fluid sample was taken.

The well was permanently abandoned as dry on 22 August 1968.

Testing

No drill stem test was performed

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
470.00	3997.00

Borekaks tilgjengelig for prøvetaking?	NO
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Borekjerne i Sakkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2271.0	2288.0	[m]
2	3881.5	3884.0	[m]

Total kjerneprøve lengde [m]	19.5
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sakkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1100.0	[m]	DC	
1120.0	[m]	DC	
1140.0	[m]	DC	
1160.0	[m]	DC	
1180.0	[m]	DC	
1200.0	[m]	DC	
1210.0	[m]	DC	
1225.0	[m]	DC	
1235.0	[m]	C	
1245.0	[m]	C	
2271.1	[m]	C	OD
2272.4	[m]	C	OD
2273.6	[m]	C	OD
2275.1	[m]	C	OD
2276.6	[m]	C	OD
2278.7	[m]	C	OD
2280.0	[m]	C	OD
2281.5	[m]	C	OD
2283.3	[m]	C	OD
2284.7	[m]	C	OD
2286.1	[m]	C	OD
2287.9	[m]	C	OD

Litostratigrafi



Topp Dyb [mMD RKB]	Litostrat. enhet
132	NORDLAND GP
544	HORDALAND GP
1041	ROGALAND GP
1041	BALDER FM
1080	SELE FM
1108	LISTA FM
1150	VÅLE FM
1163	SHETLAND GP
1163	TOR FM
1370	HOD FM
1408	BLODØKS FM
1438	HIDRA FM
1444	CROMER KNOLL GP
1444	RØDBY FM
1706	ÅSGARD FM
2080	MIME FM
2122	VIKING GP
2122	DRAUPNE FM
2217	HEATHER FM
2265	VESTLAND GP
2352	NO GROUP DEFINED
2352	SKAGERRAK FM
2532	SMITH BANK FM
2665	ZECHSTEIN GP
2665	UNDIFFERENTIATED
3829	KUPFERSCHIEFER FM
3834	ROTLIEGEND GP

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
153	pdf	0.42

Geokjemisk informasjon





Dokument navn	Dokument format	Dokument størrelse [KB]
153 1 Etyde geochimique complementaire well 17 4 1	PDF	2.18
153 2 Rapport concernant une etude geochimique 17 4 1	pdf	30.94
153 3 Preliminary results of petroleum geochemical studies of the 17 4 1 well	pdf	1.12
153 4	pdf	0.40

Dokumenter - eldre Sökkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
153 01 WDSS General Information	pdf	0.20

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
153 10 Survey report	pdf	1.26
153 11 Etude des minéraux argileux et ma jeurs	pdf	7.15
153 12 Etude micropaleontologique cretace inferieur-jura	pdf	1.11
153 13 Completion Report & Completion log	pdf	3.09
153 1 Completion Report & Completion log	pdf	3.09
153 2 Drilling summary	pdf	0.35
153 3 Bore card fiche stratigraphique	pdf	0.81
153 4 Preliminary results of petroleum geochemical studies	pdf	1.12
153 6 Rapport concernant une geochemique complementaire su	pdf	30.94
153 7 Rapport d implatation	pdf	39.58
153 8 Rapport de fine de sondage	pdf	1.11
153 9 Resultats de analyse dun enchantillon	pdf	7.35
153 5 Programme du forage	pdf	2.77

Dokumenter - Sökkeldirektoratets publikasjoner





Dokument navn	Dokument format	Dokument størrelse [KB]
153_01_NPD_Paper_No.14_Lithology_Well_17_4_1	pdf	17.82
153_02_NPD_Paper_No.14_Interpreted_Lithology_log_Well_17_4_1	pdf	64.58

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CDM	1296	2898
CDM	3420	3550
CDM	3800	3992
CST	0	0
FDC	1150	2900
FDC	3420	3800
FDC	3550	3994
GR	140	1203
IES	439	2849
IES IL	2800	3993
LL	1803	2897
MLL ML	1803	2897
SL BHC GR	439	3993
SNP	1804	2900

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	158.0	36	158.0	0.00	LOT
INTERM.	20	439.0	26	444.0	0.00	LOT
INTERM.	13 3/8	1803.0	17 1/2	1812.0	0.00	LOT
OPEN HOLE		3997.0	12 1/4	3997.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
444	1.02			seawater	





1207	1.33	50.0		waterbased	
1812	1.33	53.0		waterbased	
2503	1.37	50.0		waterbased	
3471	1.39	45.0		waterbased	
3957	1.49	50.0		waterbased	

Tynnslip i Sökkeldirektoratet

Dybde	Enhet
2278.70	[m]
2283.10	[m]
2884.90	[m]
3381.25	[m]
3881.95	[m]
3883.35	[m]