



Generell informasjon

Brønnbane navn	16/6-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	16/6-1
Seismisk lokalisering	LINE 0255 SP: 8910
Utvinningstillatelse	007
Boreoperatør	Elf Petroleum Norge AS
Boretillatelse	9-L
Boreinnretning	OCEAN VIKING
Boredager	74
Borestart	07.11.1967
Boreslutt	19.01.1968
Frigitt dato	19.01.1970
Publiseringsdato	24.09.2004
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	28.0
Vanndybde ved midlere havflate [m]	117.0
Totalt målt dybde (MD) [m RKB]	2060.5
Totalt vertikalt dybde (TVD) [m RKB]	2060.5
Temperatur ved bunn av brønnbanen [°C]	65
Eldste penetrerte alder	PRE-DEVONIAN
Eldste penetrerte formasjon	BASEMENT
Geodetisk datum	ED50
NS grader	58° 42' 6" N
ØV grader	2° 54' 44" E
NS UTM [m]	6506985.91
ØV UTM [m]	494913.16
UTM sone	31
NPDID for brønnbanen	148

**Brønnhistorie****General**

The 16/6-1 ("ODIN 1") is located on the Utsira High in the North Sea. The well was positioned crestally on the southern tip of a big, seismically defined, horst feature. This horst, trending N-S and sharply limited by faults on west, east and south sides, has induced a vast anticline in his Mesozoic and Tertiary overburden. The well was programmed to investigate the sedimentary section down to pre-Permian formations.

Operations and results

Wildcat well 16/6-1 was spudded with semi-submersible installation Ocean Viking on 7 November 1967 and drilled to TD at 2061 m in basement rock. The well was drilled with seawater down to 360 m, and with a seawater / Q'Broxin / CMC type mud from 360 m to TD.

Gas shows (C1) were observed with a GAL 21 type chromatograph while drilling the Tertiary series, mainly in the upper part with a maximum of 12 % at 630 m, decreasing to 2-3 % below 790 m. In the Cretaceous, no gas was seen and only a very small show (0.02 %å was recorded at the top of Jurassic shale. In the Utsira Formation 28 m net sand was encountered. The sands had high porosities, but were water wet. From 2019 m to 2050.5 m a very rich Draupne source rock shale with 6 % to 7 % TOC was penetrated. The sequence is immature in the well position. At 2050.5 m 4.5 m of lithic sand was found directly overlying basement. The sand is probably a basement "wash" which reflects the transition from an erosive stage to a depositional one. The lower 4 m of this sand had very good porosities (>32%) but were also water saturated. Permian and Triassic objectives were not present in the well. One core was cut in basement from 2057 to 2060.5 m (TD) with 100 % recovery. Two series of log-operations were run at 1362 m and 2060.5 m. Trouble occurred with gumbo type clay bridging the hole during the first operations and three cleaning trips were necessary. No fluid samples were attempted. The well was permanently abandoned as a dry well on 19 January 1968.

Testing

No drill stem test was performed

Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2057.0	2060.5	[m]

Total kjerneprøve lengde [m]	3.5
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet



Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1270.0	[m]	DC	
1290.0	[m]	DC	
1310.0	[m]	DC	
1330.0	[m]	DC	
1350.0	[m]	DC	
1360.0	[m]	DC	
1380.0	[m]	DC	
1395.0	[m]	DC	

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
145	NORDLAND GP
722	UTSIRA FM
769	HORDALAND GP
1255	ROGALAND GP
1255	BALDER FM
1292	SELE FM
1307	LISTA FM
1335	VÅLE FM
1344	SHETLAND GP
1344	EKOFISK FM
1362	TOR FM
1548	HOD FM
1654	BLODØKS FM
1734	SVARTE FM
1771	CROMER KNOLL GP
1771	RØDBY FM
1894	SOLA FM
1925	ÅSGARD FM
2019	VIKING GP
2019	DRAUPNE FM
2051	UNDEFINED GP
2055	BASEMENT

Spleisede logger





Dokument navn	Dokument format	Dokument størrelse [KB]
148	pdf	0.19

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
148_1	pdf	0.01
148_2 Preliminary results of geochemical studies of well 16_6_1	pdf	0.26

Dokumenter - eldre Sjøkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
148_01 WDSS General Information	pdf	0.19

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
148_1 Completion Report	pdf	0.93

Dokumenter - Sjøkeldirektoratets publikasjoner

Dokument navn	Dokument format	Dokument størrelse [KB]
148_01 NPD Paper No.9 Lithology Well 16_6_1	pdf	10.68
148_02 NPD Paper No.9 Interpreted Lithology log Well 16_6_1	pdf	33.30

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL	140	1351
CDM	1351	2057
CST	0	0





FDL C	1351	2059
IES	340	1363
IES	1351	2060
ML C	600	1362
SL BHC	340	1362
SL BHC	1351	2059
SL BHC GR	200	1362
TH	70	1325
VSP	150	2060

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	200.0	36	200.0	0.00	LOT
SURF.COND.	20	340.0	26	360.0	0.00	LOT
SURF.COND.	13 3/8	1350.0	17 1/2	1362.0	0.00	LOT
OPEN HOLE		2060.0	12 1/4	2060.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
1140	1.35	45.0		seawater	
1360	1.12	43.0		seawater	
1362	1.33	50.0		seawater	
1918	1.32	55.0		seawater	

Tynnslip i Sökkeldirektoratet

Dybde	Enhet
2058.70	[m]
2060.50	[m]
2058.70	[m]