



Generell informasjon

Brønnbane navn	24/12-2
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	24/12-2
Seismisk lokalisering	LINE 403 - 148 SP: 38.
Utvinningstillatelse	045
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	294-L
Boreinnretning	DYVI DELTA
Boredager	213
Borestart	23.06.1981
Boreslutt	21.01.1982
Frigitt dato	21.01.1984
Publiseringsdato	01.12.2004
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	32.0
Vanndybde ved midlere havflate [m]	119.0
Totalt målt dybde (MD) [m RKB]	5100.0
Totalt vertikalt dybde (TVD) [m RKB]	5091.0
Maks inklinasjon [°]	11.3
Temperatur ved bunn av brønnbanen [°C]	142
Eldste penetrerte alder	LATE JURASSIC
Eldste penetrerte formasjon	HEATHER FM
Geodetisk datum	ED50
NS grader	59° 12' 0.75" N
ØV grader	1° 52' 53.34" E
NS UTM [m]	6563033.08
ØV UTM [m]	436110.82
UTM sone	31
NPDID for brønnbanen	348



Brønnhistorie

General

Wildcat well 24/12-2 is located in the Vana Sub-basin in the Southern Viking Graben, about 11 km east of the border to British sector. The well was drilled on structure (Alpha) in the northeastern part of the block. Target was Late Jurassic sandstones.

The well is Reference well for the Sola and Grid Formations

Operations and results

Well 24/12-2 was spudded with the semi-submersible installation Dyvi Delta on 23 June 1981 and drilled to TD at 5100 m in the Late Jurassic Heather Formation. Operations on both 36" and 26" sections went smooth. During drilling of the 17 1/2" section the drill pipe broke off at 2044 m. This was recovered and drilling continued to 2445 m. One stand was left in the hole at this depth and fishing was unsuccessful. Both fish and open hole were cemented up to 2160 and the well was sidetracked from 2220 m. After setting the 13 3/8" at 2886 m casing the Kelly bushing elevation was changed from 32 m to 30 m. The 8 1/2" hole was drilled to 4306 m when a 21-day strike occurred. The well was drilled with seawater and gel down to 1005 m, with gypsum / lime / polymer from 1005 m to 2866 m, and with a Spersene / XP-20 / Resinex mud from 2886 m to TD.

Tertiary sandstones were encountered in the Grid Formation (1282 m to 1397 m), the Heimdal Formation (2202 m to 2407 m), and the Ty Formation (2567 m to 2617 m). The main target Late Jurassic sandstones were found (Intra Heather Sandstone Formation) in the intervals 4739 m to 4749 m and 4955 m to 4978 m. These sands had poor reservoir properties. Oil shows were recorded in the Heimdal Formation. Ca 380 m of Draupne Formation was penetrated by this well. The dark shales in this formation had TOC typically in the range 4 % to 7 %, but with relatively low Hydrogen Index (50 to 110 mg/g HC). The Kerogen in the shales appeared to be mostly type III with some Type II towards the top. Measured vitrinite reflectance varies somewhat between different laboratories, but maturity is advanced with %Ro in the range 0.9 (Geolab Nor 1990) to 1.0 - 1.3 (IKU 1982). Similar TOC levels as in Draupne were found all through the Heather shales down to TD, but the hydrogen index in Heather is even lower and the maturity higher. One core was taken in Intra Heather Formation Sandstone from 4960 m to 4978 m. An attempt was made to take two RFT samples, but this was not successful due to tight formation.

The well was permanently abandoned on 23 June 1981 as a well with shows.

Testing

No drill stem test was performed

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
210.00	5100.00

Borekaks tilgjengelig for prøvetaking?	YES
--	-----



Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	4960.0	4977.7	[m]

Total kjerneprøve lengde [m]	17.7
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



4960-4965m



4965-4970m



4970-4975m



4975-4977m

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
2210.0	[m]	DC	STRATLAB
2230.0	[m]	DC	STRATLAB
2250.0	[m]	DC	STRATLAB
2270.0	[m]	DC	STRATLAB
2290.0	[m]	DC	STRATLAB
2310.0	[m]	DC	STRATLAB
2330.0	[m]	DC	STRATLAB
2350.0	[m]	DC	STRATLAB
2370.0	[m]	DC	STRATLAB
2390.0	[m]	DC	STRATLAB
2410.0	[m]	DC	STRATLAB
2490.0	[m]	DC	STRATLAB
2510.0	[m]	DC	STRATLAB
2530.0	[m]	DC	STRATLAB
2550.0	[m]	DC	STRATLAB
2570.0	[m]	DC	STRATLAB



2590.0 [m]	DC	STRATLAB
2600.0 [m]	DC	STRATLAB
2615.0 [m]	DC	STRATLAB
4250.0 [m]	DC	STRATLAB
4257.0 [m]	SWC	IKU
4260.5 [m]	SWC	IKU
4262.0 [m]	SWC	IKU
4262.5 [m]	SWC	IKU
4264.0 [m]	SWC	IKU
4265.0 [m]	DC	STRATLAB
4274.7 [m]	SWC	IKU
4275.7 [m]	SWC	IKU
4280.0 [m]	DC	STRATLAB
4280.0 [m]	SWC	IKU
4282.0 [m]	SWC	IKU
4295.0 [m]	DC	STRATLAB
4310.0 [m]	DC	STRATLAB
4325.0 [m]	DC	STRATLAB
4340.0 [m]	DC	
4350.0 [m]	SWC	IKU
4400.0 [m]	SWC	IKU
4460.0 [m]	DC	STRATLAB
4475.0 [m]	DC	STRATLAB
4476.0 [m]	SWC	IKU
4490.0 [m]	DC	STRATLAB
4500.0 [m]	SWC	IKU
4505.0 [m]	DC	STRATLAB
4524.0 [m]	SWC	IKU
4535.0 [m]	DC	STRATLAB
4550.0 [m]	DC	STRATLAB
4565.0 [m]	DC	STRATLAB
4580.0 [m]	DC	STRATLAB
4595.0 [m]	DC	STRATLAB
4597.5 [m]	SWC	IKU
4610.0 [m]	DC	STRATLAB
4625.0 [m]	DC	STRATLAB
4627.5 [m]	SWC	IKU
4640.0 [m]	DC	STRATLAB
4649.0 [m]	SWC	IKU
4655.0 [m]	DC	STRATLAB



4670.0 [m]	DC	STRATLAB
4673.5 [m]	SWC	IKU
4685.0 [m]	DC	STRATLAB
4700.0 [m]	DC	STRATLAB
4715.0 [m]	DC	STRATLAB
4715.5 [m]	SWC	IKU
4730.0 [m]	DC	STRATLAB
4744.0 [m]	SWC	IKU
4745.0 [m]	DC	STRATLAB
4757.0 [m]	SWC	IKU
4760.0 [m]	DC	STRATLAB
4775.0 [m]	DC	STRATLAB
4790.0 [m]	DC	STRATLAB
4799.0 [m]	SWC	IKU
4805.0 [m]	DC	STRATLAB
4820.0 [m]	DC	STRATLAB
4835.0 [m]	DC	STRATLAB
4850.0 [m]	DC	STRATLAB
4850.5 [m]	SWC	IKU
4865.0 [m]	DC	STRATLAB
4880.0 [m]	DC	STRATLAB
4895.0 [m]	DC	STRATLAB
4898.5 [m]	SWC	IKU
4910.0 [m]	DC	STRATLAB
4925.0 [m]	DC	STRATLAB
4930.0 [m]	SWC	IKU
4940.0 [m]	DC	STRATLAB
4955.0 [m]	DC	STRATLAB
4958.5 [m]	SWC	IKU
4960.0 [m]	DC	STRATLAB
4962.8 [m]	C	IKU
4964.5 [m]	C	
4965.0 [m]	DC	STRATLAB
4968.1 [m]	C	IKU
4970.0 [m]	DC	STRATLAB
4970.0 [m]	C	STRATLAB
4974.5 [m]	C	
4975.0 [m]	DC	STRATLAB
4977.5 [m]	C	
4977.6 [m]	C	IKU



4985.0	[m]	DC	
4990.0	[m]	SWC	IKU
5000.0	[m]	DC	
5015.0	[m]	DC	
5030.0	[m]	DC	
5044.0	[m]	SWC	IKU
5045.0	[m]	DC	
5060.0	[m]	DC	
5075.0	[m]	DC	
5090.0	[m]	DC	
5100.0	[m]	DC	
5100.0	[m]	SWC	IKU

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
151	NORDLAND GP
443	UNDIFFERENTIATED
513	UTSIRA FM
823	HORDALAND GP
1282	GRID FM
1397	NO FORMAL NAME
2052	ROGALAND GP
2052	BALDER FM
2120	SELE FM
2175	LISTA FM
2202	HEIMDAL FM
2407	LISTA FM
2490	TY FM
2512	VÅLE FM
2567	TY FM
2617	VÅLE FM
2683	SHETLAND GP
2683	JORSALFARE FM
2902	KYRRE FM
3257	TRYGGVASON FM
3598	BLODØKS FM
3654	SVARTE FM
3840	CROMER KNOLL GP



3840	RØDBY FM
3985	SOLA FM
4043	ÅSGARD FM
4261	VIKING GP
4261	DRAUPNE FM
4640	HEATHER FM
4739	INTRA HEATHER FM SS
4749	HEATHER FM
4955	INTRA HEATHER FM SS
4978	HEATHER FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
348	pdf	0.80

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
348_2 Source Rock Analysis of well 24 12 2	pdf	4.70
348 1	pdf	3.02

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
348 01 WDSS General Information	pdf	0.17
348 02 WDSS completion log	pdf	0.29

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
348 24 12 2 COMPLETION REPORT AND LOG	pdf	14.22





Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL	992	2869
CBL	2869	3966
CONT.DIP	3963	5103
CST 3RUN	0	0
CYBERDIP	3962	5103
DLL MSFL	4900	5025
FDC CNL GR	200	5090
ISF SONIC SP GR	200	5090
RFT	4956	4971
TEMP	2200	4780
VELOCITY	530	5090

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	199.5	36	202.5	0.00	LOT
SURF.COND.	20	992.0	26	1005.0	1.50	LOT
INTERM.	13 3/8	2873.0	17 1/2	2886.0	1.79	LOT
INTERM.	9 5/8	3966.0	12 1/4	3980.0	2.13	LOT
OPEN HOLE		5100.0	8 1/2	5100.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
200	1.02	50.0		water based	
450	1.04	48.0		water based	
1020	1.06	40.0		water based	
1870	1.22	45.0		water based	
2365	1.22	41.0		water based	
3000	1.70	46.0		water based	
4145	1.84	64.0		water based	
4255	1.96	66.0		water based	
4400	2.03	74.0		water based	



Tynnslip i Søkeldirektoratet

Dybde	Enhet
4960.76	[m]
4962.50	[m]
4967.04	[m]
4967.60	[m]
4972.09	[m]

Trykkplott

Porertrykksdataene kommer fra logging i brønnen hvis ingen annen kilde er oppgitt. I noen brønner der trykk ikke er logget, er det brukt informasjon fra formasjonstester eller brønnspark. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
348 Formation pressure (Formasjonstrykk)	pdf	0.23

