



Generell informasjon

Brønnbane navn	9/3-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	9/3-1
Seismisk lokalisering	line 85-2261 & SP 105
Utvinningstillatelse	115
Boreoperatør	A/S Norske Shell
Boretillatelse	525-L
Boreinnretning	BORGNY DOLPHIN
Boredager	38
Borestart	29.07.1986
Boreslutt	04.09.1986
Frigitt dato	04.09.1988
Publiseringsdato	25.04.2005
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	99.0
Totalt målt dybde (MD) [m RKB]	1971.0
Totalt vertikalt dybde (TVD) [m RKB]	1970.0
Maks inklinasjon [°]	5
Temperatur ved bunn av brønnbanen [°C]	77
Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	SKAGERRAK FM
Geodetisk datum	ED50
NS grader	57° 49' 45.19" N
ØV grader	4° 45' 58.38" E
NS UTM [m]	6411210.91
ØV UTM [m]	604894.26
UTM sone	31
NPDID for brønnbanen	921



Brønnhistorie

General

Well 9/3-1 was drilled on a salt induced domal trap developed at the edge of the Stavanger Platform. The main objective of the well was to evaluate the sandstones of the Middle Jurassic Vestland Group at a prognosed depth of 1805 m. The well was designed to achieve a valid test of the prospect with one well, and to ensure a satisfactory tie of well results to existing seismic data. The prognosed TD was 2125 m. The well was planned to fully penetrate the reservoir sequence and proceed 50 m deeper than the crest, into the underlying rocks of Triassic age.

Operations and results

Wildcat well 9/3-1 was spudded with the semi-submersible installation Borgny Dolphin on 29 July 1986 and drilled to TD at 1972 m in the Triassic Skagerrak Formation. Drilling proceeded without significant problems.

Top Sandnes Formation came in at 1788 m, 18 m above prognosed depth. The reservoir was water bearing with no trace of hydrocarbons. The Vestland Group was found to be 167 m thick with porosities up to 29.5%. Permeability measurements from the core in the Sandnes Formation gave an average value of about 1000 mD, but as high as 4700 mD in one instance. No increase in background gas and no fluorescence or other hydrocarbon indications were observed on cuttings or on any of the 70 sidewall cores recovered. The Tau Formation shales had excellent source rock properties with TOC in the range 1.5 % to 4.5 % and hydrogen indexes in the range 100 to 500 mg HC/g TOC. Coals of the Lower Sandnes Formation and in the Bryne Formation also showed excellent properties with hydrogen indexes up to 465 mg HC/g TOC. No migrant hydrocarbons were however indicated by the organic geochemical analyses, and all formations penetrated by the well were immature for generation of petroleum and. One core was cut in the interval 1799 -1814 m in the Sandnes Formation. The RFT tool was run in the bottom hole section over the reservoir and 8 good pressure points confirmed a water gradient. No fluid sample was taken.

The well was permanently abandoned on 4 September 1986 as a dry hole.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
225.00	1969.00

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

Borekjerne i Sokkeldirektoratet



Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1798.0	1805.4	[m]

Total kjerneprøve lengde [m]	7.4
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



1798-1802m



1802-1805m

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
310.0	[m]	DC	RRI
330.0	[m]	DC	RRI
350.0	[m]	DC	RRI
370.0	[m]	DC	RRI
390.0	[m]	DC	RRI
410.0	[m]	DC	RRI
430.0	[m]	DC	RRI
450.0	[m]	DC	RRI
470.0	[m]	DC	RRI
490.0	[m]	DC	RRI
510.0	[m]	DC	RRI
530.0	[m]	DC	RRI
550.0	[m]	DC	RRI
570.0	[m]	DC	RRI
590.0	[m]	DC	RRI
610.0	[m]	DC	RRI

Litostratigrafi



Topp Dyb [mMD RKB]	Litostrat. enhet
124	NORDLAND GP
223	HORDALAND GP
454	ROGALAND GP
454	BALDER FM
468	SELE FM
476	LISTA FM
519	VÅLE FM
548	SHETLAND GP
548	EKOFISK FM
580	TOR FM
695	HOD FM
852	CROMER KNOLL GP
852	RØDBY FM
882	SOLA FM
963	ÅSGARD FM
1446	BOKNEFJORD GP
1446	FLEKKEFJORD FM
1488	SAUDA FM
1686	TAU FM
1749	EGERSUND FM
1788	VESTLAND GP
1788	SANDNES FM
1843	BRYNE FM
1955	NO GROUP DEFINED
1955	SKAGERRAK FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
921	pdf	0.40

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
921_1	pdf	0.33





921_2	pdf	1.62
-----------------------	-----	------

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
921_01_WDSS_General_Information	pdf	0.21
921_02_WDSS_completion_log	pdf	0.17

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
921_9_3_1_COMPLETION_LOG	pdf	0.95
921_9_3_1_COMPLETION_REPORT	pdf	13.30

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL	230	1335
DIL LSS GR	1350	1979
DLL MSFL GR	1350	1967
ISF LSS GR	204	540
ISF LSS GR	529	1356
LDL CNL GR	204	540
LDL CNL GR	529	1356
LDL CNL NGL	1350	1971
RFT	1801	1837
SHDT	1350	1972
SHDT GR	529	1354
VSP	204	1970

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	204.5	36	215.0	0.00	LOT
SURF.COND.	20	528.0	26	540.0	1.40	LOT





INTERM.	13 3/8	1349.0	17 1/2	1360.0	1.80	LOT
OPEN HOLE		1971.0	12 1/4	1971.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
158	1.03			WATER BASED	08.09.1986
179	1.03			WATERBASED	04.08.1986
188	1.03			WATERBASED	06.08.1986
215	1.03			WATERBASED	04.08.1986
215	0.00			WATERBASED	06.08.1986
220	1.03	9.0	22.0	WATERBASED	06.08.1986
227	0.00			WATER BASED	03.09.1986
540	1.08	10.0	30.0	WATERBASED	06.08.1986
540	0.00	8.0	30.0	WATERBASED	11.08.1986
540	0.00	10.0	30.0	WATERBASED	11.08.1986
540	0.00	12.0	30.0	WATERBASED	14.08.1986
540	0.00			WATERBASED	14.08.1986
545	1.15	12.0	18.0	WATERBASED	14.08.1986
720	1.15	13.0	24.0	WATERBASED	14.08.1986
931	1.17	12.0	23.0	WATER BASED	21.08.1986
1159	1.20	12.0	22.0	WATER BASED	21.08.1986
1210	1.50			WATER BASED	01.09.1986
1316	1.21	13.0	14.0	WATER BASED	21.08.1986
1360	1.20	13.0	15.0	WATER BASED	21.08.1986
1360	1.20	19.0	18.0	WATER BASED	21.08.1986
1360	1.20	18.0	20.0	WATER BASED	21.08.1986
1360	1.20	17.0	10.0	WATER BASED	21.08.1986
1426	1.21	21.0	17.0	WATER BASED	22.08.1986
1562	1.20	15.0	18.0	WATER BASED	22.08.1986
1610	1.26	21.0	18.0	WATER BASED	22.08.1986
1757	1.40	30.0	24.0	WATER BASED	25.08.1986
1798	1.42	30.0	20.0	WATER BASED	25.08.1986
1810	1.55	28.0	16.0	WATER BASED	28.08.1986
1885	1.55	30.0	18.0	WATER BASED	28.08.1986
1895	1.55	34.0	22.0	WATER BASED	28.08.1986
1914	1.55	28.0	22.0	WATER BASED	31.08.1986
1953	1.50	30.0	27.0	WATER BASED	31.08.1986



1972	1.50	28.0	19.0	WATER BASED	31.08.1986
1972	1.51	29.0	20.0	WATER BASED	01.09.1986
1972	1.50	28.0	19.0	WATER BASED	31.08.1986

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 brønnspar. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
921 Formation pressure (Formasjonstrykk)	pdf	0.19

