



Generell informasjon

Brønnbane navn	35/9-1
Type	EXPLORATION
Formål	WILDCAT
Status	SUSPENDED
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	GJØA
Funn	35/9-1 GjØa
Brønn navn	35/9-1
Seismisk lokalisering	DGM 1-86-0473 3D CDP 1850
Utvinningstillatelse	153
Boreoperatør	Norsk Hydro Produksjon AS
Boretillatelse	603-L
Boreinnretning	POLAR PIONEER
Boredager	37
Borestart	01.04.1989
Boreslutt	07.05.1989
Frigitt dato	07.05.1991
Publiseringsdato	15.12.2006
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	VIKING GP
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	BRENT GP
3. nivå med hydrokarboner, alder	EARLY JURASSIC
3. nivå med hydrokarboner, formasjon	DUNLIN GP
Avstand, boredekk - midlere havflate [m]	23.0
Vanndybde ved midlere havflate [m]	361.0
Totalt målt dybde (MD) [m RKB]	2350.0
Totalt vertikalt dybde (TVD) [m RKB]	2348.0
Maks inklinasjon [°]	5.5



Temperatur ved bunn av brønnbanen [°C]	60
Eldste penetrerte alder	PRE-DEVONIAN
Eldste penetrerte formasjon	BASEMENT
Geodetisk datum	ED50
NS grader	61° 23' 7.95" N
ØV grader	3° 59' 3.72" E
NS UTM [m]	6806290.80
ØV UTM [m]	552595.04
UTM sone	31
NPDID for brønnbanen	1375

Brønnhistorie



General

Well 35/9-1 was drilled on the Måløy Slope north of the Horda Platform. The drilled "A-structure" is an asymmetric horst with the larger fault to the east, antithetic to the Øygarden fault zone. The primary objective of well 35/9-1 was to test the hydrocarbon potential and reservoir quality in Middle Jurassic sandstones of the Brent Group. Secondary objective was to test the hydrocarbon potential and reservoir quality in the Dunlin Group and Statfjord Formation. A third objective was to test the prospectivity in Cretaceous fans, building out from the southeast. The well would also test the cap rock properties as well as the possibility of any reservoir rocks in the Late Jurassic. The commitment was to drill to 4000 m, or into Triassic rocks whatever came first. No shallow gas was predicted at the well location.

Operations and results

Wildcat well 35/9-1 was spudded with the semi-submersible installation Polar Pioneer on 1 April 1989 and drilled to TD at 2350 m in crystalline basement rock. In the 17 1/2" section the mud system became heavily contaminated from cement after the 13 3/8" casing had parted between 1067 m and 1083 m. To cure this the 9 5/8" casing was run and cemented inside the 13 3/8" casing. Otherwise no significant problems were encountered in the operations. The well was drilled with seawater and hi-vis pills down to 815 m and with KCl/polymer mud from 815 m to TD.

No sands were encountered within the Early Cretaceous sequence. The Jurassic was found gas bearing from 2036.5 m in the Viking Group, through the Brent Group, and with a somewhat uncertain gas/oil contact at 2282 m in the Early Jurassic Dunlin Group. An oil-down-to contact was found at 2301 m in the Dunlin Group. The reservoir in the Viking Group consisted of interbedded shales and sandstones of the Fensfjord, Krossfjord, and Heather Formations. RFT tests showed that there is no pressure communication between the Brent Group and the Viking Group. No Triassic succession was present at the well location; the Dunlin Group (Pliensbachian age sediments) rested directly on metamorphic basement.

Four conventional cores were cut in the Viking Group and another four in the Brent and Dunlin Groups and ca 2 m into the basement. A segregated RFT sample was taken at 2282.5 m. It recovered 5 litres of oil in the 2 3/4 Gallon chamber and 2.3 litres of oil in the 1 Gallon chamber, in addition to some gas and water/filtrate.

The well was prepared for testing. It was suspended as an oil and gas discovery on 7 May 1989, and the rig headed for Stavanger for TOGI Fjordtest. Well testing was postponed for a re-entry after the TOGI assignment.

Testing

No drill stem test was performed

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
820.00	2350.00

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



Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2040.0	2065.6	[m]
2	2094.0	2102.0	[m]
3	2107.0	2137.7	[m]
4	2138.0	2150.0	[m]
5	2225.0	2238.0	[m]
6	2242.0	2270.4	[m]
7	2270.4	2305.0	[m]
8	2305.0	2316.5	[m]

Total kjerneprøve lengde [m]	163.8
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2040-2045m



2045-2050m



2050-2055m



2055-2060m



2060-2065m



2065-2066m



2094-2099m



2099-2102m



2102-2107m



2107-2112m



2112-2117m



2117-2122m



2122-2127m



2127-2132m



2132-2137m



2137-2138m



2138-2143m



2143-2148m



2148-2150m



2225-2230m



2230-2235m



2235-2238m



2242-2247m



2247-2252m



2252-2257m



2257-2262m



2262-2267m



2267-2270m



2270-2275m



2275-2280m



2280-2285m



2285-2290m



2290-2295m



2295-2300m



2300-2305m



2305-2306m



2305-2310m



2310-2315m



2315-2316m

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
837.0	[m]	SWC	HYDRO
979.5	[m]	SWC	HYDRO
1116.5	[m]	SWC	HYDRO



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 18.5.2024 - 18:07

1227.5 [m]	SWC	HYDRO
1238.0 [m]	SWC	HYDRO
1244.0 [m]	SWC	HYDRO
1258.0 [m]	SWC	HYDRO
1300.0 [m]	SWC	HYDRO
1404.5 [m]	SWC	HYDRO
1513.0 [m]	SWC	HYDRO
1702.0 [m]	SWC	HYDRO
1719.0 [m]	SWC	HYDRO
1737.0 [m]	SWC	HYDRO
1757.0 [m]	SWC	HYDRO
1787.5 [m]	SWC	HYDRO
1800.0 [m]	SWC	HYDRO
1812.5 [m]	SWC	HYDRO
1831.5 [m]	SWC	HYDRO
1842.0 [m]	SWC	HYDRO
1864.0 [m]	SWC	HYDRO
1876.0 [m]	SWC	HYDRO
1896.0 [m]	SWC	HYDRO
1920.0 [m]	SWC	HYDRO
1955.0 [m]	SWC	HYDRO
1965.0 [m]	SWC	HYDRO
1977.0 [m]	SWC	HYDRO
1983.0 [m]	SWC	HYDRO
1987.5 [m]	SWC	HYDRO
1992.0 [m]	SWC	HYDRO
2001.0 [m]	SWC	HYDRO
2006.0 [m]	SWC	HYDRO
2015.0 [m]	SWC	HYDRO
2019.5 [m]	SWC	HYDRO
2024.0 [m]	SWC	HYDRO
2027.0 [m]	SWC	HYDRO
2032.5 [m]	SWC	HYDRO
2037.5 [m]	SWC	HYDRO
2040.0 [m]	SWC	HYDRO
2040.0 [m]	C	HYDRO
2041.4 [m]	C	HYDRO
2042.4 [m]	C	HYDRO
2043.6 [m]	C	HYDRO
2044.1 [m]	C	HYDRO



2045.5	[m]	C	C RO
2046.1	[m]	C	HYDRO
2046.6	[m]	C	HYDRO
2049.7	[m]	C	HYDRO
2052.4	[m]	C	HYDRO
2053.9	[m]	C	HYDRO
2054.5	[m]	C	HYDRO
2055.5	[m]	C	HYDRO
2056.1	[m]	C	HYDRO
2058.7	[m]	C	HYDRO
2060.5	[m]	C	HYDRO
2065.6	[m]	C	HYDRO
2073.0	[m]	SWC	HYDRO
2081.0	[m]	SWC	HYDRO
2086.0	[m]	SWC	HYDRO
2092.0	[m]	SWC	HYDRO
2094.2	[m]	C	HYDRO
2096.6	[m]	C	HYDRO
2108.3	[m]	C	HYDRO
2126.4	[m]	C	HYDRO
2132.2	[m]	C	HYDRO
2137.1	[m]	C	HYDRO
2140.2	[m]	C	HYDRO
2146.8	[m]	C	HYDRO
2150.6	[m]	C	HYDRO
2157.5	[m]	SWC	HYDRO
2167.5	[m]	SWC	HYDRO
2177.0	[m]	SWC	HYDRO
2187.0	[m]	SWC	HYDRO
2194.5	[m]	SWC	HYDRO
2200.0	[m]	SWC	HYDRO
2212.5	[m]	SWC	HYDRO
2219.0	[m]	SWC	HYDRO
2224.5	[m]	SWC	HYDRO
2230.9	[m]	C	HYDRO
2247.0	[m]	C	HYDRO
2248.4	[m]	C	HYDRO
2249.1	[m]	C	HYDRO
2250.2	[m]	C	HYDRO
2251.4	[m]	C	HYDRO



2252.4	[m]	C	HYDRO
2254.4	[m]	C	HYDRO
2259.0	[m]	C	HYDRO
2263.4	[m]	C	HYDRO
2268.9	[m]	C	HYDRO
2272.6	[m]	C	HYDRO
2274.8	[m]	C	HYDRO
2283.1	[m]	C	HYDRO
2290.0	[m]	C	HYDRO
2292.9	[m]	C	HYDRO
2293.9	[m]	C	HYDRO
2297.5	[m]	C	HYDRO
2303.6	[m]	C	HYDRO
2308.6	[m]	C	HYDRO
2310.0	[m]	C	HYDRO
2310.9	[m]	C	HYDRO

Oljeprøver i Sokkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST	TEST1	2285.00	2291.80		12.07.1989 - 00:00	YES
DST	DST1	0.00	0.00		12.07.1989 - 00:00	YES
DST		2225.40	2249.40			YES
DST	DST2	0.00	0.00	CONDE NSATE	15.07.1989 - 00:00	YES
DST		2100.30	2138.30			YES
DST	TEST3	0.00	0.00	CONDE NSATE	20.07.1989 - 00:00	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
384	NORDLAND GP
588	ROGALAND GP



588	BALDER FM
620	SELE FM
658	LISTA FM
823	NO FORMAL NAME
863	LISTA FM
1211	VÅLE FM
1229	SHETLAND GP
1229	JORSALFARE FM
1280	KYRRE FM
1940	SVARTE FM
1967	CROMER KNOLL GP
1967	RØDBY FM
2013	ÅSGARD FM
2037	VIKING GP
2037	FENSEFJORD FM
2099	KROSSFJORD FM
2140	HEATHER FM
2225	BRENT GP
2225	NESS FM
2250	RANNOCH FM
2267	DUNLIN GP
2312	STATFJORD GP
2314	BASEMENT

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
1375_1	pdf	1.00

Dokumenter - eldre Sökkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
1375_01_WDSS_General_Information	pdf	0.39
1375_02_WDSS_completion_log	pdf	0.15

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)





Dokument navn	Dokument format	Dokument størrelse [KB]
1375 35 9 1 COMPLETION REPORT AND LOG	pdf	20.44

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL GR	700	2312
CBL VDL GR	1750	2314
CST	837	1920
CST	1955	2224
DIL BHC GR SP	800	1924
DIL LSS GR SP	1940	2349
DLL MSFL	1940	2348
LSS GR CAL	800	1703
MWD - GR RES DIR	411	2225
MWD - GR RES DIR	2303	2350
NGL CNL LDL	1940	2351
RFT AMS	2038	2300
SHDT	1940	2352
VSP	800	2300

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	436.0	36	456.0	0.00	LOT
INTERM.	20	799.0	26	815.0	1.33	LOT
INTERM.	9 5/8	1917.0	12 1/4	1942.0	1.79	LOT
INTERM.	13 3/8	1924.0	17 1/2	1942.0	0.00	LOT
LINER	7	2348.0	8 1/2	2350.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
437	1.25	18.0	15.0	WATER BASED	26.07.1989
456	1.05			WATER BASED	03.04.1989





Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 18.5.2024 - 18:07

466	1.05			WATER BASED	03.04.1989
693	1.05			WATER BASED	04.04.1989
815	1.08	21.0	8.0	WATER BASED	06.04.1989
815	1.05			WATER BASED	05.04.1989
815	1.08	21.0	8.0	WATER BASED	10.04.1989
815	1.08	21.0	8.0	WATER BASED	07.04.1989
886	1.10	13.0	5.0	WATER BASED	10.04.1989
1335	1.20	18.0	7.0	WATER BASED	10.04.1989
1605	1.20	17.0	8.0	WATER BASED	12.04.1989
1715	1.25	18.0	15.0	WATER BASED	26.07.1989
1739	1.20	16.0	7.0	WATER BASED	12.04.1989
1767	1.25	10.0	5.0	WATER BASED	05.07.1989
1850	1.22	17.0	8.0	WATER BASED	13.04.1989
1942	1.25	17.0	8.0	WATER BASED	14.04.1989
1942	1.25	16.0	7.0	WATER BASED	17.04.1989
1942	1.25	13.0	5.0	WATER BASED	17.04.1989
1942	1.25	17.0	8.0	WATER BASED	17.04.1989
1942	1.25	13.0	5.0	WATER BASED	17.04.1989
1942	1.25	17.0	8.0	WATER BASED	17.04.1989
1942	1.25	16.0	7.0	WATER BASED	17.04.1989
1942	1.25	13.0	5.0	WATER BASED	17.04.1989
1942	1.25	15.0	6.0	WATER BASED	18.04.1989
1942	1.25	14.0	6.0	WATER BASED	19.04.1989
1942	1.25	17.0	8.0	WATER BASED	17.04.1989
1942	1.25	16.0	7.0	WATER BASED	17.04.1989
1945	1.25	12.0	6.0	WATER BASED	20.04.1989
1945	1.25	12.0	6.0	WATER BASED	21.04.1989
1948	1.25	14.0	6.0	WATER BASED	24.04.1989
2040	1.25	24.0	6.0	WATER BASED	24.04.1989
2081	1.25	22.0	9.0	WATER BASED	24.04.1989
2120	1.28	23.0	8.0	WATER BASED	26.04.1989
2144	1.28	20.0	6.0	WATER BASED	26.04.1989
2218	1.28	23.0	8.0	WATER BASED	27.04.1989
2224	1.25	19.0	18.0	WATER BASED	19.07.1989
2224	1.25	18.0	17.0	WATER BASED	21.07.1989
2224	1.25	18.0	18.0	WATER BASED	24.07.1989
2224	1.25	18.0	15.0	WATER BASED	24.07.1989
2224	1.25	18.0	17.0	WATER BASED	20.07.1989
2224	1.25	18.0	18.0	WATER BASED	24.07.1989
2241	1.28	21.0	7.0	WATER BASED	28.04.1989



2269	1.28	24.0	8.0	WATER BASED	02.05.1989
2280	1.25	18.0	16.0	WATER BASED	14.07.1989
2280	1.25	18.0	16.0	WATER BASED	17.07.1989
2280	1.25	19.0	16.0	WATER BASED	17.07.1989
2280	1.25	19.0	16.0	WATER BASED	17.07.1989
2280	1.25	18.0	15.0	WATER BASED	18.07.1989
2306	1.28	24.0	7.0	WATER BASED	02.05.1989
2308	1.25	15.0	10.0	WATER BASED	10.07.1989
2308	1.25	15.0	10.0	WATER BASED	10.07.1989
2308	1.26			WATER BASED	10.07.1989
2308	1.26			WATER BASED	11.07.1989
2308	1.25	18.0	9.0	WATER BASED	12.07.1989
2308	1.25	16.0	8.0	WATER BASED	13.07.1989
2308	1.25	15.0	10.0	WATER BASED	07.07.1989
2313	1.28	25.0	11.0	WATER BASED	08.05.1989
2316	1.28	22.0	6.0	WATER BASED	02.05.1989
2319	1.28	23.0	8.0	WATER BASED	08.05.1989
2350	1.28	24.0	8.0	WATER BASED	03.05.1989
2350	1.28	24.0	8.0	WATER BASED	02.05.1989
2350	1.28	23.0	8.0	WATER BASED	05.05.1989
2350	1.28	24.0	9.0	WATER BASED	05.05.1989

Tynnslip i Sökkeldirektoratet

Dybde	Enhet
2136.21	[m]
2134.10	[m]
2126.75	[m]
2123.46	[m]
2118.76	[m]
2115.45	[m]
2112.00	[m]
2108.71	[m]
2102.12	[m]
2100.50	[m]
2053.50	[m]
2266.50	[m]
2269.75	[m]
2280.50	[m]
2288.50	[m]



2289.22	[m]
2280.73	[m]
2270.57	[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 brønnspar. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
1375 Formation pressure (Formasjonstrykk)	pdf	0.21

