



Generell informasjon

Brønnbane navn	34/7-12
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	TORDIS
Funn	34/7-12 Tordis
Brønn navn	34/7-12
Seismisk lokalisering	SG 8431 ROW 155 COLUMN 534
Utvinningstillatelse	089
Boreoperatør	Saga Petroleum ASA
Boretillatelse	567-L
Boreinnretning	TREASURE SAGA
Boredager	68
Borestart	11.10.1987
Boreslutt	17.12.1987
Frigitt dato	17.12.1989
Publiseringsdato	28.02.2008
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	TARBERT FM
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	NESS FM
Avstand, boredekk - midlere havflate [m]	26.0
Vanndybde ved midlere havflate [m]	190.0
Totalt målt dybde (MD) [m RKB]	2784.0
Totalt vertikalt dybde (TVD) [m RKB]	2780.0
Maks inklinasjon [°]	5.4
Temperatur ved bunn av brønnbanen [°C]	100
Eldste penetrerte alder	LATE TRIASSIC



Eldste penetrerte formasjon	LUNDE FM
Geodetisk datum	ED50
NS grader	61° 16' 17.86" N
ØV grader	2° 6' 47.26" E
NS UTM [m]	6793527.52
ØV UTM [m]	452441.55
UTM sone	31
NPDID for brønnbanen	1187

Brønnhistorie

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Well 34/7-12 is a replacement well for well 34/7-11, which was junked for technical reasons. It is located in the Tampen Spur area in the Northern North Sea. Its overall purpose was to assess the hydrocarbon potential in the "B"-structure in the southern part of the block. The primary objectives were to establish the thickness and reservoir quality of the prospective Brent the Brent Group in Group, and to determine the OWC. The secondary objectives were to assess the potential of the Dunlin Cook Formation reservoir, the Statfjord Formation and the upper part of the Triassic Lunde unit B/C reservoir section. TD was prognosed to 2900 m.

Operations and results

Wildcat well 34/7-12 was spudded 20 m north of the 34/7-11 location. It was drilled with the semi-submersible installation Treasure Saga on 11 October 1987 and drilled to TD at 2784 m in the Late Triassic Lunde Formation. The well was drilled without significant technical problems. The well was drilled with spud mud down to 852 m and with KCl mud from 852 m to TD.

The Brent Group came in at 2169 m, and Statfjord Formation at 2606 m. Lunde Formation was encountered at 2763 m. Oil/water contact was defined in the Ness Formation at 2250 m.

The Brent Group, from 2169 to 2340.5 m (171.5 m thick) comprised the sandy Tarbert Formation, the interbedded shaly and sandy Ness Formation, the sandy Etive and Rannoch Formations and at the base the conglomeratic Broom Formation. The Dunlin Group was penetrated from 2340.5 to 2606 m (265.5 m thick), comprising the shaly Drake Formation at the top, the Cook Formation with interbedded sandstone and claystone, the Burton Formation with claystone and minor sandstone and the Amundsen and Calcareous Amundsen Formations having clay stones with minor limestone. The Statfjord Formation, 157 m thick from 2606 to 2763 m, was dominated by sandstones with minor to interbedded claystone. The Late Triassic upper Lunde Formation was encountered at 2763 m, and comprised clay stone interbedded with siltstone.

The Brent Group was hydrocarbon-bearing through the Tarbert Formation and into the Ness Formation with an OWC at 2250 m, confirmed by logs and FMT pressure gradients. Shows were seen down to 2268 m. In addition, shows were reported from a sidewall core cut at 1803 m in a Paleocene sand. Logs also indicated the presence of a two metre thick residual or hydrocarbon bearing zone from 1801 m to 1803 m. Shows were also reported in siltstones in the interval 2060 to 2142 m in the Late Cretaceous Kyrre Formation. No indications of hydrocarbons were reported below 2268 m.

A total of 10 cores were cut from 2169 to 2360.5 m in the Brent Group and 20 m into the Dunlin Group. A total of 180.8 m core was recovered (94.4 % of cored section). FMT segregated fluid samples were taken at 2171 m (oil and gas), 2171.5 m (oil and gas),



2189.5 m (two samples in different runs, both with oil and gas), 2249.5 m (gas and oil-cut mud), and at 2252.5 m (water). The samples from 2171 and 2189.5 m were analysed and found to be very similar with oil densities close to 0.845 g/cm³, gas gravities in the range 0.863 to 0.879, and CO₂ contents in the range 0.22 to 0.29 %.

The well was permanently abandoned on 17 December 1987 as an oil discovery.

Testing

Three drill stem tests were performed in well 34/7-12.

DST 1 tested the interval 2276.2 - 2282.2 m in the Rannoch Formation and produced up to 1297 Sm³ water/day through a 12.7 mm choke. Up to 10% sand production was reported in the beginning of the main flow period. Maximum down-hole temperature recorded (at 2230.7 m) was 84.2 deg C.

DST 2 tested the interval 2229 - 2235 m in the Ness Formation. On a 12.7 mm choke this test produced 881 Sm³ oil and 59383 Sm³ gas /day. The corresponding GOR was 68 Sm³/Sm³, the oil density was 0.841 g/cm³, and the gas gravity was 0.722 (air = 1). Maximum down-hole temperature recorded (at 2202.6 m) was 83.4 deg C.

DST 3 tested the interval 2205.5 - 2209.5 m in the lower Tarbert Formation. On a 14.3 mm choke this test produced 1460 Sm³ oil and 96450 Sm³ gas /day. The corresponding GOR was 68 Sm³/Sm³, the oil density was 0.840 g/cm³, and the gas gravity was 0.695 (air = 1). Maximum down-hole temperature recorded (at 2161.3 m) was 82.1 deg C.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
860.00	2784.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2169.0	2196.3	[m]
2	2196.5	2212.9	[m]
3	2214.0	2215.5	[m]
4	2216.0	2224.9	[m]
5	2228.0	2242.4	[m]
6	2242.0	2261.5	[m]
7	2262.0	2289.9	[m]
8	2290.0	2305.0	[m]
9	2305.5	2332.5	[m]
10	2333.0	2356.6	[m]



Total kjerneprøve lengde [m]	181.5
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2169-2174m



2174-2179m



2179-2184m



2184-2189m



2189-2194m



2194-2198m



2196-2201m



2201-2206m



2206-2211m



2211-2212m



2214-2215m



2216-2221m



2221-2224m



2228-2233m



2233-2238m



2238-2242m



2242-2247m



2247-2252m



2252-2257m



2257-2261m



2262-2267m



2267-2272m



2272-2277m



2277-2282m



2282-2287m



2287-2289m



2290-2295m



2295-2300m



2300-2305m



2305-2310m



2310-2315m



2315-2320m



2320-2325m



2325-2330m



2330-2332m



2333-2338m



2338-2343m



2343-2348m



2348-2353m



2353-2356m

Palynologiske preparater i Sjøkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1010.0	[m]	DC	PALEO
1021.0	[m]	DC	PALEO
1025.0	[m]	DC	PALEO
1040.0	[m]	DC	PALEO
1050.0	[m]	DC	PALEO
1070.0	[m]	DC	PALEO
1080.0	[m]	DC	PALEO
1099.5	[m]	DC	PALEO
1100.0	[m]	DC	PALEO
1110.0	[m]	DC	PALEO
1130.0	[m]	DC	PALEO
1140.0	[m]	DC	PALEO
1150.0	[m]	DC	PALEO
1160.0	[m]	DC	PALEO
1170.0	[m]	DC	PALEO
1190.0	[m]	DC	PALEO



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 14.5.2024 - 17:08

1200.0 [m]	DC	PALEO
1220.0 [m]	DC	PALEO
1228.0 [m]	DC	PALEO
1230.0 [m]	DC	PALEO
1250.0 [m]	DC	PALEO
1270.0 [m]	DC	PALEO
1280.0 [m]	DC	PALEO
1300.0 [m]	DC	PALEO
1310.0 [m]	DC	PALEO
1330.0 [m]	DC	PALEO
1340.0 [m]	DC	PALEO
1360.0 [m]	DC	PALEO
1370.0 [m]	DC	PALEO
1390.0 [m]	DC	PALEO
1400.0 [m]	DC	PALEO
1420.0 [m]	DC	PALEO
1430.0 [m]	DC	PALEO
1450.0 [m]	DC	PALEO
1460.0 [m]	DC	PALEO
1480.0 [m]	DC	PALEO
1490.0 [m]	DC	PALEO
1510.0 [m]	DC	PALEO
1520.0 [m]	DC	PALEO
1540.0 [m]	DC	PALEO
1550.0 [m]	DC	PALEO
1570.0 [m]	DC	PALEO
1580.0 [m]	DC	PALEO
1600.0 [m]	DC	PALEO
1610.0 [m]	DC	PALEO
1630.0 [m]	DC	PALEO
1640.0 [m]	DC	PALEO
1660.0 [m]	DC	PALEO
1670.0 [m]	DC	PALEO
1690.0 [m]	DC	PALEO
1696.0 [m]	SWC	PALEO
1700.0 [m]	DC	PALEO
1710.0 [m]	DC	PALEO
1730.0 [m]	DC	PALEO
1740.0 [m]	DC	PALEO
1760.0 [m]	DC	PALEO



1770.0 [m]	DC	PALEO
1790.0 [m]	DC	PALEO
1800.0 [m]	DC	PALEO
1815.0 [m]	DC	PALEO
1830.0 [m]	DC	PALEO
1845.0 [m]	DC	PALEO
1860.0 [m]	DC	PALEO
1875.0 [m]	DC	PALEO
1890.0 [m]	DC	PALEO
1900.0 [m]	SWC	PALEO
1905.0 [m]	DC	PALEO
1920.0 [m]	DC	PALEO
1935.0 [m]	DC	PALEO
1950.0 [m]	DC	PALEO
1965.0 [m]	DC	PALEO
1980.0 [m]	DC	PALEO
1995.0 [m]	DC	PALEO
2010.0 [m]	DC	PALEO
2025.0 [m]	DC	PALEO
2040.0 [m]	DC	PALEO
2055.0 [m]	DC	PALEO
2070.0 [m]	DC	PALEO
2085.0 [m]	DC	PALEO
2100.0 [m]	DC	PALEO
2115.0 [m]	DC	PALEO
2130.0 [m]	DC	PALEO
2145.0 [m]	DC	PALEO
2160.0 [m]	DC	PALEO
2162.0 [m]	DC	PALEO
2171.5 [m]	DC	PALEO
2175.0 [m]	DC	PALEO
2178.8 [m]	DC	PALEO
2198.8 [m]	DC	PALEO
2209.5 [m]	DC	PALEO
2214.5 [m]	DC	PALEO
2218.8 [m]	DC	PALEO
2220.8 [m]	DC	PALEO
2223.8 [m]	DC	PALEO
2229.5 [m]	DC	PALEO
2237.8 [m]	DC	PALEO



2243.0	[m]	DC	PALEO
2258.7	[m]	DC	PALEO
2279.5	[m]	DC	PALEO
2299.0	[m]	DC	PALEO
2305.8	[m]	DC	PALEO
2313.0	[m]	DC	PALEO
2319.5	[m]	DC	PALEO
2326.4	[m]	DC	PALEO
2341.0	[m]	DC	PALEO
2348.0	[m]	DC	PALEO
2350.9	[m]	DC	PALEO
2353.1	[m]	DC	PALEO
2355.8	[m]	DC	PALEO
2358.0	[m]	DC	PALEO
2364.0	[m]	DC	PALEO
2373.0	[m]	DC	PALEO
2391.0	[m]	DC	PALEO
2433.0	[m]	DC	PALEO
2451.0	[m]	DC	PALEO
2460.0	[m]	DC	PALEO
2490.0	[m]	DC	PALEO
2505.0	[m]	DC	PALEO
2520.0	[m]	DC	PALEO
2534.0	[m]	DC	PALEO
2553.0	[m]	DC	PALEO
2555.0	[m]	DC	PALEO
2563.0	[m]	DC	PALEO
2580.0	[m]	DC	PALEO
2622.0	[m]	DC	PALEO
2634.0	[m]	DC	PALEO
2640.0	[m]	DC	PALEO
2670.0	[m]	DC	PALEO
2682.0	[m]	DC	PALEO
2727.0	[m]	DC	PALEO
2742.0	[m]	DC	PALEO
2754.0	[m]	DC	PALEO
2768.0	[m]	DC	PALEO
2772.0	[m]	DC	PALEO
2784.0	[m]	DC	PALEO



Oljeprøver i Søkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST	DST2	2229.00	2235.00		03.12.1987 - 11:30	YES
DST	DST3	2205.50	2209.50		10.12.1987 - 23:00	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
216	NORDLAND GP
989	UTSIRA FM
1021	HORDALAND GP
1151	NO FORMAL NAME
1308	NO FORMAL NAME
1365	NO FORMAL NAME
1428	NO FORMAL NAME
1644	ROGALAND GP
1644	BALDER FM
1692	LISTA FM
1834	SHETLAND GP
1834	JORSALFARE FM
1997	KYRRE FM
2154	CROMER KNOLL GP
2154	RØDBY FM
2160	MIME FM
2161	VIKING GP
2161	HEATHER FM
2169	BRENT GP
2169	TARBERT FM
2213	NESS FM
2252	ETIVE FM
2269	RANNOCH FM
2334	BROOM FM
2341	DUNLIN GP
2341	DRAKE FM
2462	COOK FM



2518	BURTON FM
2547	AMUNDSEN FM
2606	STATFJORD GP
2763	HEGRE GP
2763	LUNDE FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
1187_1	pdf	0.74
1187_2	pdf	2.43

Dokumenter - eldre Sökkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
1187_01 WDSS General Information	pdf	0.43
1187_02 WDSS completion log	pdf	0.26

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
1187_01_34_7_12 Completion report	pdf	8.97
1187_02_34_7_12 Completion log	pdf	1.67

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	2276	2282	12.7
2.0	2229	2235	12.7
3.0	2206	2210	14.3

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0	15.000		49.000	84





2.0	19.000		43.000	83
3.0	23.000		48.000	82

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstygde rel. luft	GOR [m3/m3]
1.0		1685			
2.0	881	59000	0.841	0.722	68
3.0	1460	96000	0.840	0.695	66

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
ACBL	600	1852
CDL CNL GR	2100	2479
CDL GR	837	1836
CNL CDL GR	1852	2784
CNL CDL GR	2140	2784
COREGUN	858	1848
COREGUN	1875	2775
DIFL LS BHC GR	837	1852
DIFL LS BHC GR	1852	2784
DIPMETER	1850	2784
DLL MLL GR	2100	2476
DLL MLL GR	2125	2784
FMT	2171	2312
FMT	2210	2474
FMT	2210	2692
MWD - GR RES DIR	327	2781
VELOCITY	1525	2784

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	327.0	36	379.0	0.00	LOT
SURF.COND.	20	838.0	26	852.0	1.66	LOT
INTERM.	13 3/8	1851.0	17 1/2	1870.0	2.23	LOT
INTERM.	9 5/8	2366.0	12 1/4	2784.0	0.00	LOT



Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
332	1.05			WATER BASED	14.10.1987
378	1.13	5.0	12.0	WATER BASED	28.10.1987
852	1.05	20.0	10.1	WATER BASED	28.10.1987
852	1.05	22.0	8.7	WATER BASED	28.10.1987
852	1.17	5.0	13.5	WATER BASED	21.10.1987
852	1.20	6.0	12.5	WATER BASED	21.10.1987
852	1.15	6.0	13.5	WATER BASED	28.10.1987
870	1.09	18.0	8.7	WATER BASED	28.10.1987
1335	1.17	22.0	10.6	WATER BASED	28.10.1987
1544	1.25	25.0	12.0	WATER BASED	26.10.1987
1865	1.58	34.0	12.0	WATER BASED	26.10.1987
1865	1.58	35.0	11.5	WATER BASED	28.10.1987
1865	1.58	35.0	12.5	WATER BASED	28.10.1987
1870	1.58	32.0	10.6	WATER BASED	28.10.1987
2106	1.72	32.0	8.7	WATER BASED	29.10.1987
2120	1.72	24.0	6.8	WATER BASED	14.12.1987
2155	1.72	24.0	6.8	WATER BASED	16.12.1987
2180	1.72	27.0	6.3	WATER BASED	30.10.1987
2214	1.72	31.0	7.2	WATER BASED	02.11.1987
2224	1.72	24.0	6.8	WATER BASED	08.12.1987
2234	1.72	29.0	5.3	WATER BASED	02.11.1987
2267	1.72	25.0	6.8	WATER BASED	08.12.1987
2267	1.72	28.0	6.3	WATER BASED	08.12.1987
2276	1.72	30.0	4.8	WATER BASED	03.11.1987
2313	1.72	30.0	6.3	WATER BASED	10.11.1987
2330	1.72	30.0	7.2	WATER BASED	25.11.1987
2330	1.72	30.0	7.2	WATER BASED	23.11.1987
2330	1.72	30.0	7.2	WATER BASED	23.11.1987
2357	1.72	30.0	5.3	WATER BASED	10.11.1987
2366	1.72	28.0	5.3	WATER BASED	10.11.1987
2381	1.72	31.0	10.6	WATER BASED	20.11.1987
2480	1.70	28.0	5.3	WATER BASED	10.11.1987
2480	1.72	28.0	4.8	WATER BASED	10.11.1987
2480	1.72	27.0	6.3	WATER BASED	10.11.1987



2510	1.72	25.0	5.8	WATER BASED	10.11.1987
2595	1.72	26.0	6.3	WATER BASED	10.11.1987
2609	1.72	22.0	5.3	WATER BASED	11.11.1987
2622	1.72	23.0	5.3	WATER BASED	12.11.1987
2655	1.72	25.0	5.3	WATER BASED	13.11.1987
2705	1.72	25.0	6.3	WATER BASED	16.11.1987
2778	1.72	28.0	6.3	WATER BASED	16.11.1987
2784	1.72	28.0	6.8	WATER BASED	16.11.1987
2784	1.72	28.0	6.8	WATER BASED	17.11.1987
2784	1.72	26.0	6.3	WATER BASED	18.11.1987
2784	1.72	26.0	6.3	WATER BASED	19.11.1987

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]
1187 Formation pressure (Formasjonstrykk)	pdf	0.22

