



Generell informasjon

Brønnbane navn	34/7-17
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	VIGDIS
Funn	34/7-8 Vigdis
Brønn navn	34/7-17
Seismisk lokalisering	GE-83 & ROW 341- COL. 1025
Utvinningstillatelse	089
Boreoperatør	Saga Petroleum ASA
Boretillatelse	668-L
Boreinnretning	TREASURE SAGA
Boredager	42
Borestart	25.02.1991
Boreslutt	07.04.1991
Frigitt dato	07.04.1993
Publiseringsdato	28.02.2008
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	26.0
Vanndybde ved midlere havflate [m]	259.0
Totalt målt dybde (MD) [m RKB]	3115.0
Totalt vertikalt dybde (TVD) [m RKB]	3111.0
Maks inklinasjon [°]	6.6
Temperatur ved bunn av brønnbanen [°C]	103
Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	LUNDE FM
Geodetisk datum	ED50
NS grader	61° 20' 50.69" N
ØV grader	2° 5' 42.31" E
NS UTM [m]	6801982.38
ØV UTM [m]	451591.07



UTM sone	31
NPDID for brønnbanen	1713

Brønnhistorie

General

Well 34/7-17 is located on the Vigdis Field on Tampen Spur in the Northern North Sea. It was drilled on the southern extension of the C-Plus prospect, on the eastern margin of a complete or non-truncated Brent Group sequence. Furthermore, the location is defined by the down dipping geometry to the northwest, and the proximity to a major fault zone to the south. The primary purpose of the well was to test the reservoir quality and fluid contacts in the prospect. The sequence was drilled in a structural position where a large range of oil-water contacts could be tested. A secondary objective was to test the pressure regimes in the Jurassic sequence, including possible depletion associated with pressure communication, previously identified in the nearby Tordis Field.

Operations and results

Well 34/7-17 was spudded with the semi-submersible installation Treasure Saga on 25 February 1991 and drilled to TD at 3115 m in the Late Triassic Lunde Formation. Due to leaks in the riser the 26? section was drilled riserless while the riser was sent onshore for repairs. First returns to the rig floor was at 897 m. From the MWD logs possible shallow gas was interpreted at 519 - 520, 576 - 576.5 and 692 -693 m, but flow checks performed proved negative. The well was drilled with spud mud down to 897 m, and with KCl mud from 897 m to TD.

In the Nordland, Hordaland, Rogaland and Shetland Groups, the well penetrated mainly claystones with minor sandstone intervals. Top of the Brent Group reservoir was reached at 2461 m (2458 m TVD), which was 38 m deeper than prognosed. The Jurassic section comprised a minor interval of the Viking Group, and a complete section of the Middle Jurassic Brent Group, the Early Jurassic Dunlin Group and the Statfjord Formation. Both main reservoir targets, the Brent Group and the Statfjord Formation, proved to be water bearing. Scattered oil shows were noted in sandstones in drill cuttings from the Lista Formation (at 1855 to 1900 m). A continuous section with traces of both direct and predominantly crush cut fluorescence was recorded in side wall cores between 2235 and 2405 m. Only scattered shows were recorded on the cores taken in the primary target Brent Group reservoir (at 2467 m and at 2472 to 2481 m). Shows were again noted in sandstone side wall cores from the Amundsen and Statfjord Formations in the interval 2920 to 3080 m.

A total of 8 cores were cut in the Brent Group between 2460.0 and 2586.0 m (driller's depth). This makes a total of 126 m, of which 117.05 m were recovered (93%). Two RFT runs were conducted, one in the Lista Formation and one in the Early - Middle Jurassic. The resulting pressure gradients showed three different pressure regimes in the Middle - Early Jurassic, each separated by ca 5 bar pressure. Highest pressure was seen in the Statfjord Formation, medium pressure was seen in the Lower Brent Group and the lowest pressure in the upper Brent Group (Tarbert Formation). Only one (at 1881.5 m) of the pressure measurements taken in the Rogaland Group was reliable, indicating an equivalent pressure gradient of 1.40-1.41 g/cc subsea. One segregated RFT fluid sample was taken at 1881.5 m. The content was reported to be water and mud.

The open hole was plugged back to 2408 m and prepared for sidetracking to a new reservoir target. The well is classified as dry with shows.



Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
900.00	3114.00

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

Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2460.0	2478.5	[m]
2	2478.5	2496.9	[m]
3	2498.0	2507.5	[m]
4	2508.0	2531.6	[m]
5	2534.0	2542.0	[m]
6	2545.0	2552.5	[m]
7	2554.0	2570.2	[m]
8	2571.0	2586.0	[m]

Total kjerneprøve lengde [m]	116.7
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2460-2465m



2465-2470m



2470-2475m



2475-2478m



2478-2483m



2483-2488m



2488-2493m



2493-2496m



2498-2503m



2503-2507m



2508-2513m



2513-2518m



2518-2523m



2523-2528m



2528-2531m



2534-2539m



2539-2542m



2545-2550m



2550-2552m



2554-2559m



2559-2564m



2564-2569m



2569-2570m



2571-2576m



2576-2581m



2581-2586m



2497-2502m



2502-2507m



2507-2512m



2512-2517m

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
285	NORDLAND GP
1050	UTSIRA FM



1070	HORDALAND GP
1257	NO FORMAL NAME
1331	NO FORMAL NAME
1403	NO FORMAL NAME
1423	NO FORMAL NAME
1699	ROGALAND GP
1699	BALDER FM
1770	LISTA FM
1924	SHETLAND GP
1924	JORSALFARE FM
2116	KYRRE FM
2444	CROMER KNOLL GP
2444	RØDBY FM
2448	MIME FM
2451	VIKING GP
2451	HEATHER FM
2461	BRENT GP
2461	TARBERT FM
2510	NESS FM
2559	ETIVE FM
2631	RANNOCH FM
2697	DUNLIN GP
2697	DRAKE FM
2789	COOK FM
2818	BURTON FM
2832	AMUNDSEN FM
2943	STATFJORD GP
3085	HEGRE GP
3085	LUNDE FM

Dokumenter - eldre Sökkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
1713_01_WDSS_General_Information	pdf	0.52
1713_02_WDSS_completion_log	pdf	0.19

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)





Dokument navn	Dokument format	Dokument størrelse [KB]
1713 34 7 17 COMPLETION REPORT AND LOG	pdf	25.94

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL GR	780	1942
DIL LSS LDL GR SP	879	1948
DITE MSFL LDL CNL GR	1953	3116
DSI GR	1953	3113
MWD DPR RGD - GR RES DIR	285	3115
RFT GR	1879	1914
RFT GR	2462	3074
SHDT GR	1953	3119
VELOCITY	1000	3115

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	371.0	36	372.0	0.00	LOT
INTERM.	20	881.0	26	902.0	1.83	LOT
INTERM.	13 3/8	1955.0	17 1/2	1974.0	1.80	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
390	1.20			WATER BASED	01.03.1991
390	1.20			WATER BASED	04.03.1991
390	1.20			WATER BASED	27.02.1991
390	1.04			WATER BASED	05.03.1991
815	1.04			WATER BASED	05.03.1991
897	1.04			WATER BASED	05.03.1991
897	1.04			WATER BASED	05.03.1991
897	1.04			WATER BASED	07.03.1991
897	1.30	20.0	16.0	WATER BASED	11.03.1991





1268	1.30	25.0	23.0	WATER BASED	12.03.1991
1509	1.40	31.0	25.0	WATER BASED	12.03.1991
1807	1.49	36.0	24.0	WATER BASED	12.03.1991
1879	1.49	33.0	18.0	WATER BASED	14.03.1991
1879	1.49	33.0	15.0	WATER BASED	19.03.1991
1879	1.49	32.0	16.0	WATER BASED	19.03.1991
1969	1.49	32.0	17.0	WATER BASED	13.03.1991
1969	1.49	34.0	18.0	WATER BASED	13.03.1991
1974	1.49	27.0	16.0	WATER BASED	19.03.1991
2036	1.51	31.0	14.0	WATER BASED	19.03.1991
2272	1.60	34.0	15.0	WATER BASED	20.03.1991
2460	1.65	40.0	15.0	WATER BASED	22.03.1991
2460	1.65	40.0	15.0	WATER BASED	25.03.1991
2460	1.65	37.0	15.0	WATER BASED	25.03.1991
2460	1.65	39.0	16.0	WATER BASED	25.03.1991
2460	1.65	42.0	20.0	WATER BASED	25.03.1991
2460	1.65	43.0	22.0	WATER BASED	27.03.1991
2460	1.65	25.0	13.0	WATER BASED	05.04.1991
2460	1.65	27.0	15.0	WATER BASED	09.04.1991
2460	1.65	25.0	18.0	WATER BASED	09.04.1991
2460	1.65	36.0	16.0	WATER BASED	21.03.1991
2460	1.65	25.0	14.0	WATER BASED	08.04.1991
2460	1.65	26.0	16.0	WATER BASED	09.04.1991

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]
1713 Formation pressure (Formasjonstrykk)	pdf	0.22

