



Generell informasjon

Brønnbane navn	34/7-21
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	TORDIS
Funn	34/7-21 Borg
Brønn navn	34/7-21
Seismisk lokalisering	SG 8431: ROW 211& COLUMN 1241
Utvinningstillatelse	089
Boreoperatør	Saga Petroleum ASA
Boretillatelse	747-L
Boreinnretning	TREASURE SAGA
Boredager	54
Borestart	19.10.1992
Boreslutt	11.12.1992
Frigitt dato	11.12.1994
Publiseringsdato	28.02.2008
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	EARLY CRETACEOUS
1. nivå med hydrokarboner, formasjon.	NO FORMAL NAME
2. nivå med hydrokarboner, alder	LATE JURASSIC
2. nivå med hydrokarboner, formasjon	INTRA DRAUPNE FM SS
Avstand, boredekk - midlere havflate [m]	26.0
Vanndybde ved midlere havflate [m]	192.0
Totalt målt dybde (MD) [m RKB]	3015.0
Totalt vertikalt dybde (TVD) [m RKB]	3014.0
Maks inklinasjon [°]	4.3
Temperatur ved bunn av brønnbanen [°C]	106
Eldste penetrerte alder	EARLY JURASSIC



Eldste penetrerte formasjon	DRAKE FM
Geodetisk datum	ED50
NS grader	61° 17' 36.84" N
ØV grader	2° 4' 21.14" E
NS UTM [m]	6796001.43
ØV UTM [m]	450299.76
UTM sone	31
NPDID for brønnbanen	2026

Brønnhistorie

General

Exploration well 34/7-21 was drilled the south-western part of block 34/7 on Tampen Spur, on the H-prospect northwest of the Tordis Field. The main objective was to test the hydrocarbon prospectivity within the Late Jurassic (Viking Group) interval. The target was a Late Jurassic sand wedge, truncated in the up-dip direction towards the east by the Base Cretaceous Unconformity. Sufficient amounts of reservoir sand were conditioned by erosion and re-sedimentation from the underlying Middle Jurassic Brent Group, which is progressively truncated up-dip in the same direction. The secondary objective was to test the Paleocene in which an oil discovery had been made in well 34/7-18.

Operations and results

Well 34/7-21 was spudded with the semi-submersible installation Treasure Saga on 19 October 1992 and drilled to TD at 3015 m in the Early Jurassic Drake Formation. Tight and sticky formation was reported in the 12 1/4" section, but no significant technical problems occurred in the operations. Based on the site survey, possible shallow gas was predicted at 298, 548 and 612 m. The MWD confirmed a gas bearing sand at 541 m - 548 m. A flow check proved negative. The well was drilled with spud mud down to 1113 m and with KCl polymer mud from 1113 m to TD.

In the Nordland, Hordaland, and Upper Rogaland Groups, the well penetrated mainly clay/claystone with minor sand, except for the sandy Utsira Formation between 929-1040 m. At the base of the Rogaland Group, the Lista Formation sandstone was encountered and proven dry, but with shows. In the Shetland and the condensed Cromer Knoll Group, claystone with limestone beds and massive marls/limestones were penetrated, respectively. A hydrocarbon-bearing interval was proven in a sand in the Cromer Knoll at 2498-2501 m. The top of the Late Jurassic reservoir was reached at 2508 m, which was 29 m shallower than prognosed. Within the Draupne Formation, two separate oil bearing sandstone intervals were proven between 2508-2545 m and between 2565.5-2569 m. The latter contained high concentrations of H₂S. All three hydrocarbon bearing intervals had separate formation pressure regimes, and did not communicate. No OWC was identified at any level. The overall ODT was 2569 m (2543 m MSL).

Apart from the three hydrocarbon bearing reservoirs shows were reported in several intervals. In the base of the Rogaland Group, traces of good oil shows were detected in argillaceous sandstones (intra Lista Formation) at 1850-1858 m. In the Shetland Group, good oil shows occurred in thin sandstone horizons from about 2270 m. The shows in this interval decreased progressively from below 2425 m. In the top of the Heather Formation, traces of weak oil shows was identified in a siltstone bed at 2587.5-2588.5 m. No shows were reported below this depth.



A total of 5 cores were cut in well 34/7-21. Core 1 was cut in the interval 1858 to 1885.7 m in the Sele/Lista Formations. Cores 2-5 were cut in the Draupne Formation and down into the top of the Heather Formation, at 2515 to 2594 m.

FMT fluid samples were taken at 2498.5 m (oil), 2529.7 m (oil), and at 2567.5 m (two samples in different runs, both with oil).

After testing the well was plugged back and prepared for sidetracking to explore the extension of the Late Jurassic reservoirs. The plugged back hole was permanently abandoned on 11 December 1992 and the well was classified as an oil discovery.

Testing

The interval 2510.5-2537.5 m, covering the main part of the upper Intra-Draupne Sand, was perforated and tested. The oil rate at the end of the second main flow was measured to 884 Sm³/day through a 12.7 mm choke. The corresponding wellhead pressure was 146 bar and the GOR was 95 Sm³/Sm³, while the dead oil density was 0.85 g cm³ and the gas gravity was 0.89 (air = 1). The reported bottom hole temperature/reservoir temperature from the test was 91 deg C.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
340.00	3014.00

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

Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1858.0	1880.7	[m]
2	2515.0	2522.2	[m]
3	2530.0	2547.0	[m]
4	2547.0	2565.8	[m]
5	2566.0	2592.2	[m]

Total kjerneprøve lengde [m]	91.9
Kjerne tilgjengelig for prøvetaking?	YES

Kjernebilder



1858-1862m



1862-1866m



1866-1870m



1870-1974m



1874-1878m



1878-1880m



2525-2519m



2519-2522m



2530-2534m



2534-2538m



2538-2542m



2542-2546m



2546-2547m



2547-2551m



2551-2555m



2555-2559m



2559-2563m



2563-2565m



2566-2570m



2570-2574m



2574-2578m



2578-2582m



2582-2586m



2586-2590m



2590-2592m

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
350.0	[m]	DC	PALEO
380.0	[m]	DC	PALEO
410.0	[m]	DC	PALEO



440.0 [m]	DC	PALEO
470.0 [m]	DC	PALEO
500.0 [m]	DC	PALEO
530.0 [m]	DC	PALEO
560.0 [m]	DC	PALEO
590.0 [m]	DC	PALEO
620.0 [m]	DC	PALEO
650.0 [m]	DC	PALEO
680.0 [m]	DC	PALEO
710.0 [m]	DC	PALEO
740.0 [m]	DC	PALEO
770.0 [m]	DC	PALEO
800.0 [m]	DC	PALEO
830.0 [m]	DC	PALEO
860.0 [m]	DC	PALEO
890.0 [m]	DC	PALEO
920.0 [m]	DC	PALEO
950.0 [m]	DC	PALEO
980.0 [m]	DC	PALEO
1010.0 [m]	DC	PALEO
1040.0 [m]	DC	PALEO
1070.0 [m]	DC	PALEO
1100.0 [m]	DC	PALEO
1130.0 [m]	DC	PALEO
1160.0 [m]	DC	PALEO
1190.0 [m]	DC	PALEO
1220.0 [m]	DC	PALEO
1250.0 [m]	DC	PALEO
1280.0 [m]	DC	PALEO
1310.0 [m]	DC	PALEO
1340.0 [m]	DC	PALEO
1370.0 [m]	DC	PALEO
1400.0 [m]	DC	PALEO
1430.0 [m]	DC	PALEO
1460.0 [m]	DC	PALEO
1490.0 [m]	DC	PALEO
1520.0 [m]	DC	PALEO
1550.0 [m]	DC	PALEO
1580.0 [m]	DC	PALEO
1610.0 [m]	DC	PALEO



1640.0 [m]	DC	PALEO
1670.0 [m]	DC	PALEO
1700.0 [m]	DC	PALEO
1710.0 [m]	DC	PALEO
1720.0 [m]	DC	PALEO
1730.0 [m]	DC	PALEO
1740.0 [m]	DC	PALEO
1750.0 [m]	DC	PALEO
1760.0 [m]	DC	PALEO
1770.0 [m]	DC	PALEO
1780.0 [m]	DC	PALEO
1790.0 [m]	DC	PALEO
1800.0 [m]	DC	PALEO
1810.0 [m]	DC	PALEO
1815.0 [m]	DC	PALEO
1825.0 [m]	DC	PALEO
1835.0 [m]	DC	PALEO
1845.0 [m]	DC	PALEO
1855.0 [m]	DC	PALEO
1880.0 [m]	C	RRI
1885.0 [m]	DC	PALEO
1895.0 [m]	DC	PALEO
1915.0 [m]	DC	PALEO
1940.0 [m]	DC	PALEO
1975.0 [m]	DC	PALEO
2005.0 [m]	DC	PALEO
2035.0 [m]	DC	PALEO
2065.0 [m]	DC	PALEO
2095.0 [m]	DC	PALEO
2125.0 [m]	DC	PALEO
2155.0 [m]	DC	PALEO
2185.0 [m]	DC	PALEO
2215.0 [m]	DC	PALEO
2245.0 [m]	DC	PALEO
2275.0 [m]	DC	PALEO
2305.0 [m]	DC	PALEO
2335.0 [m]	DC	PALEO
2365.0 [m]	DC	PALEO
2395.0 [m]	DC	PALEO
2425.0 [m]	DC	PALEO



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 10.5.2024 - 00:56

2455.0	[m]	DC	PALEO
2485.0	[m]	DC	PALEO
2515.0	[m]	DC	PALEO
2516.0	[m]	C	PALEO
2517.0	[m]	C	PALEO
2518.0	[m]	C	PALEO
2520.0	[m]	C	RRI
2531.0	[m]	C	RRI
2532.0	[m]	C	RRI
2533.0	[m]	C	PALEO
2541.0	[m]	C	PALEO
2548.0	[m]	C	PALEO
2556.0	[m]	C	PALEO
2557.0	[m]	C	RRI
2558.0	[m]	C	RRI
2560.0	[m]	C	RRI
2561.0	[m]	C	RRI
2563.0	[m]	C	RRI
2564.0	[m]	C	PALEO
2568.0	[m]	C	RRI
2569.0	[m]	C	RRI
2571.0	[m]	C	PALEO
2579.0	[m]	C	PALEO
2582.0	[m]	C	PALEO
2590.0	[m]	C	PALEO
2633.0	[m]	DC	PALEO
2648.0	[m]	DC	PALEO
2663.0	[m]	DC	PALEO
2688.0	[m]	DC	PALEO
2693.0	[m]	DC	PALEO
2708.0	[m]	DC	PALEO
2723.0	[m]	DC	PALEO
2753.0	[m]	DC	PALEO
2768.0	[m]	DC	PALEO
2783.0	[m]	DC	PALEO
2798.0	[m]	DC	PALEO
2813.0	[m]	DC	PALEO
2828.0	[m]	DC	PALEO
2843.0	[m]	DC	PALEO
2858.0	[m]	DC	PALEO



2873.0	[m]	DC	PALEO
2888.0	[m]	DC	PALEO
2918.0	[m]	DC	PALEO
2933.0	[m]	DC	PALEO
2948.0	[m]	DC	PALEO
2963.0	[m]	DC	PALEO
2978.0	[m]	DC	PALEO
2993.0	[m]	DC	PALEO
3008.0	[m]	DC	PALEO
3014.0	[m]	DC	PALEO

Oljeprøver i Sökkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST	TEST1	0.00	0.00	OIL	03.12.1992 - 09:10	YES
DST	TEST2	0.00	0.00	OIL	05.12.1992 - 15:40	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
218	NORDLAND GP
1025	UTSIRA FM
1040	HORDALAND GP
1200	NO FORMAL NAME
1278	NO FORMAL NAME
1322	NO FORMAL NAME
1403	NO FORMAL NAME
1711	ROGALAND GP
1711	BALDER FM
1754	LISTA FM
1856	NO FORMAL NAME
1863	LISTA FM
1900	SHETLAND GP
1900	JORSALFARE FM
2168	KYRRE FM
2499	CROMER KNOLL GP



2499	RØDBY FM
2502	MIME FM
2508	VIKING GP
2508	INTRA DRAUPNE FM SS
2545	DRAUPNE FM
2565	INTRA DRAUPNE FM SS
2569	DRAUPNE FM
2588	HEATHER FM
2692	BRENT GP
2692	TARBERT FM
2763	NESS FM
2865	ETIVE FM
2903	RANNOCH FM
2966	BROOM FM
2972	DUNLIN GP
2972	DRAKE FM

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
2026_01_WDSS_General_Information	pdf	0.51
2026_02_WDSS_completion_log	pdf	0.19

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
2026_34_7_21_COMPLETION_REPORT_AND_LOG	pdf	21.08

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	2510	2537	12.7





Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningsstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0	14.000		32.000	91

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyngde rel. luft	GOR [m3/m3]
1.0	884		0.850	0.890	95

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBIL GR	1796	1900
CBIL GR	2484	2550
CBIL GR	2545	2999
DIPL ZDL CN GR	1794	2560
DIPLOG GR	1794	3014
DLL ACL ZDL GR	1089	1805
DLL MLL GR	1794	2562
DLL MLL GR	2480	3015
DPIL DAC ZDL CN SL	1795	3015
FMT GR	1794	3014
FMT GR	2510	2538
MWD CDR - GR RES DIR	218	3015
SWC	1853	2978
VELOCITY	990	2990

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	316.0	36	330.0	0.00	LOT
INTERM.	20	1094.0	26	1113.0	1.67	LOT
INTERM.	13 3/8	1795.0	17 1/2	1810.0	1.85	LOT
INTERM.	9 5/8	2639.0	12 1/4	3015.0	0.00	LOT

Boreslam



Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
326	1.04			WATER BASED	
330	1.05			WATER BASED	
675	1.16	4.0		WATER BASED	
1110	1.17	5.0		WATER BASED	
1113	1.17	6.0		WATER BASED	
1122	1.25	22.0		WATER BASED	
1404	1.30	32.0		WATER BASED	
1763	1.50	41.0		WATER BASED	
1810	1.50	42.0		WATER BASED	
1858	1.51	39.0		WATER BASED	
2081	1.60	49.0		WATER BASED	
2196	1.64	60.0		WATER BASED	
2307	1.64	53.0		WATER BASED	
2510	1.62	41.0		WATER BASED	
2530	1.64	50.0		WATER BASED	
2552	1.64	43.0		WATER BASED	
2566	1.64	44.0		WATER BASED	
2594	1.64	38.0		WATER BASED	
2601	1.61	39.0		WATER BASED	
2635	1.64	42.0		WATER BASED	
2654	1.61	39.0		WATER BASED	
2971	1.55	36.0		WATER BASED	
3015	1.61	38.0		WATER BASED	

Tynnslip i Sokkeldirektoratet

Dybde	Enhet
1868.70	[m]
1875.65	[m]
2531.60	[m]
2537.35	[m]
2566.20	[m]
2566.80	[m]
2567.70	[m]
2568.50	[m]
2570.45	[m]
2571.40	[m]



2576.45 [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]
2026 Formation pressure (Formasjonstrykk)	pdf	0.22

