



Generell informasjon

Brønnbane navn	6608/10-3
Type	EXPLORATION
Formål	APPRAISAL
Status	SUSPENDED
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Felt	NORNE
Funn	6608/10-2 Norne
Brønn navn	6608/10-3
Seismisk lokalisering	B-18-83& SP. 1345
Utvinningstillatelse	128
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	753-L
Boreinnretning	ROSS RIG (2)
Boredager	64
Borestart	07.01.1993
Boreslutt	11.03.1993
Frigitt dato	11.03.1995
Publiseringsdato	24.09.2002
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	FANGST GP
2. nivå med hydrokarboner, alder	EARLY JURASSIC
2. nivå med hydrokarboner, formasjon	BÅT GP
Avstand, boredekk - midlere havflate [m]	24.0
Vanndybde ved midlere havflate [m]	382.0
Totalt målt dybde (MD) [m RKB]	2921.0
Totalt vertikalt dybde (TVD) [m RKB]	2919.5
Maks inklinasjon [°]	5.5
Temperatur ved bunn av brønnbanen [°C]	115
Eldste penetrerte alder	EARLY JURASSIC



Eldste penetrerte formasjon	ÅRE FM
Geodetisk datum	ED50
NS grader	66° 2' 6.66" N
ØV grader	8° 4' 57.97" E
NS UTM [m]	7324321.37
ØV UTM [m]	458426.47
UTM sone	32
NPDID for brønnbanen	1732

Brønnhistorie

General

The main objective of well 6608/10-3 was to appraise oil accumulation in the Jurassic Fangst and Båt groups in the Northern Fault Block on the Norne field off shore Mid Norway.

Operations and results

Appraisal well 6608/10-3 was spudded by the semi-submersible installation "Ross Rig" on 7 January 1993 and drilled to a total depth of 2921 m, into rocks of Lower Jurassic age. The well was drilled water based. Seawater/bentonite spud mud was used down to 469 m, seawater/CMC EHV spud mud from 469 m to 874 m, and Gyp/PAC polymer mud from 874 m to TD. Oil and gas was encountered in the Early to Middle Jurassic Båt and Fangst Groups. Eleven cores were cut in the interval 2560 m to 2765 m, from the lower part of the Melke Formation, through the Fangst Group and into the Tilje Formation of the Båt Group. Four segregated FMT samples were taken at 2599.2 m in the Garn Formation (gas, mud filtrate, and small amount of oil), 2603.2 m in the Garn Formation (mud filtrate, gas, and oil), 2624.5 m in the Ile Formation (gas, and oil), and at 2715.2 in the Tilje Formation (mud filtrate and water with small amount of gas). The well was suspended on 11 March as an oil and gas appraisal well. The well was re-entered on 8 August 1995 with the semi-submersible installation "Ross Isle". The re-entry, 6608/10-3 R, was permanently plugged and abandoned as an oil and gas appraisal well.

Testing

One drill stem test was performed in well 6608/10-3 in the Ile Formation (perforated interval 2617-2648 m). The well produced 1250 Sm³/D of oil with a density of 860 kg/m³ at standard conditions and 102500 Sm³/D of gas with a relative density of 0.65 (air=1.0) through a 60/64" (23.44 mm) choke.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
890.00	2754.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2560.0	2576.4	[m]
2	2576.4	2604.0	[m]
3	2604.0	2605.0	[m]
4	2618.0	2622.0	[m]
5	2627.0	2652.7	[m]
6	2653.0	2680.1	[m]
7	2680.1	2702.0	[m]
8	2703.0	2704.0	[m]
9	2705.0	2710.6	[m]
10	2710.6	2738.0	[m]
11	2738.6	2765.0	[m]

Total kjerneprøve lengde [m]	184.1
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2560-2565m



2565-2570m



2570-2575m



2575-2576m



2576-2604m



2606-2611m



2611-2616m



2616-2621m



2621-2622m



2627-2632m



2632-2637m



2637-2642m



2642-2647m



2647-2652m



2652-2653m



2653-2658m



2658-2663m



2663-2668m



2668-2673m



2673-2678m



2678-2680m



2680-2685m



2685-2690m



2690-2695m



2695-2700m



2700-2703m



2703-2704m



2705-2710m



2710-2711m



2711-2715m



2715-2710m



2720-2725m



2725-2730m



2730-2735m



2735-2738m



2738-2743m



2743-2748m



2748-2753m



2753-2758m



2758-2763m



2763-2766m



Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1580.0	[m]	DC	GEOST
1597.5	[m]	SWC	STATO
1620.0	[m]	DC	GEOST
1640.0	[m]	DC	GEOST
1654.0	[m]	SWC	STATO
1660.0	[m]	DC	GEOST
1681.0	[m]	SWC	STATO
1690.0	[m]	SWC	STATO
1700.0	[m]	DC	GEOST
1720.0	[m]	DC	GEOST
1740.0	[m]	DC	GEOST
1760.0	[m]	DC	GEOST
1766.0	[m]	SWC	STATO
1780.0	[m]	DC	GEOST
1800.0	[m]	DC	GEOST
1823.0	[m]	SWC	STATO
1840.0	[m]	DC	GEOST
1860.0	[m]	DC	GEOST
1890.0	[m]	SWC	STATO
1900.0	[m]	DC	GEOST
1920.0	[m]	DC	GEOST
1932.0	[m]	SWC	STATO
1940.0	[m]	DC	GEOST
1950.0	[m]	SWC	STATO
1956.0	[m]	SWC	STATO
1974.0	[m]	DC	GEOST
1992.0	[m]	DC	GEOST
2004.0	[m]	DC	GEOST
2028.0	[m]	DC	GEOST
2040.0	[m]	DC	GEOST
2058.0	[m]	DC	GEOST
2070.0	[m]	DC	GEOST
2082.0	[m]	DC	GEOST
2095.0	[m]	SWC	STATO
2112.0	[m]	SWC	STATO



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 10.5.2024 - 09:04

2130.0 [m]	DC	GEOST
2141.0 [m]	SWC	STATO
2154.0 [m]	DC	GEOST
2163.0 [m]	SWC	STATO
2178.0 [m]	DC	GEOST
2186.0 [m]	SWC	STATO
2190.0 [m]	DC	GEOST
2202.0 [m]	DC	GEOST
2220.0 [m]	DC	GEOST
2230.0 [m]	SWC	STATO
2244.0 [m]	DC	GEOST
2262.0 [m]	DC	GEOST
2268.0 [m]	SWC	STATO
2274.0 [m]	DC	GEOST
2292.0 [m]	DC	GEOST
2310.0 [m]	DC	GEOST
2322.0 [m]	SWC	STATO
2334.0 [m]	DC	GEOST
2352.0 [m]	DC	GEOST
2362.0 [m]	SWC	STATO
2376.0 [m]	DC	GEOST
2383.0 [m]	SWC	STATO
2391.0 [m]	DC	GEOST
2400.0 [m]	DC	GEOST
2410.0 [m]	SWC	STATO
2413.0 [m]	SWC	STATO
2421.0 [m]	DC	GEOST
2424.5 [m]	SWC	STATO
2435.0 [m]	SWC	STATO
2445.0 [m]	DC	GEOST
2446.0 [m]	SWC	STATO
2454.0 [m]	DC	GEOST
2463.0 [m]	DC	GEOST
2472.0 [m]	SWC	STATO
2481.0 [m]	DC	GEOST
2490.0 [m]	DC	GEOST
2498.0 [m]	SWC	STATO
2499.0 [m]	DC	GEOST
2508.0 [m]	DC	GEOST
2510.0 [m]	SWC	STATO



2517.0	[m]	DC	GEOST
2526.0	[m]	DC	GEOST
2528.0	[m]	SWC	STATO
2535.0	[m]	DC	GEOST
2537.0	[m]	SWC	STATO
2544.0	[m]	DC	GEOST
2553.0	[m]	DC	GEOST
2560.0	[m]	SWC	STATO
2566.0	[m]	SWC	STATO
2572.6	[m]	SWC	STATO
2573.9	[m]	SWC	STATO
2581.0	[m]	SWC	STATO
2586.0	[m]	SWC	STATO
2589.0	[m]	SWC	STATO
2595.5	[m]	SWC	STATO
2604.3	[m]	SWC	STATO
2609.3	[m]	SWC	STATO
2612.7	[m]	SWC	STATO
2615.6	[m]	SWC	STATO
2617.4	[m]	SWC	STATO
2621.1	[m]	SWC	STATO
2627.4	[m]	SWC	STATO
2630.5	[m]	SWC	STATO
2637.3	[m]	SWC	STATO
2640.4	[m]	SWC	STATO
2645.1	[m]	SWC	STATO
2649.5	[m]	SWC	STATO
2658.5	[m]	SWC	STATO
2661.1	[m]	SWC	STATO
2661.6	[m]	SWC	STATO
2670.6	[m]	SWC	STATO
2673.9	[m]	SWC	STATO
2678.9	[m]	SWC	STATO
2681.8	[m]	SWC	STATO
2687.5	[m]	SWC	STATO
2691.2	[m]	SWC	STATO
2695.7	[m]	SWC	STATO
2701.1	[m]	SWC	STATO
2708.6	[m]	SWC	STATO
2709.2	[m]	SWC	STATO



2709.6	[m]	SWC	STATO
2710.8	[m]	SWC	STATO
2717.5	[m]	SWC	STATO
2720.7	[m]	SWC	STATO
2726.4	[m]	SWC	STATO
2733.5	[m]	SWC	STATO
2740.9	[m]	SWC	STATO
2743.2	[m]	SWC	STATO
2749.0	[m]	SWC	STATO
2754.5	[m]	SWC	STATO
2760.0	[m]	SWC	STATO
2765.5	[m]	SWC	STATO
2769.0	[m]	DC	GEOST
2769.5	[m]	SWC	STATO
2784.0	[m]	DC	GEOST
2787.0	[m]	DC	GEOST
2791.5	[m]	SWC	STATO
2795.0	[m]	SWC	STATO
2796.0	[m]	DC	GEOST
2803.0	[m]	SWC	STATO
2820.0	[m]	DC	GEOST
2823.0	[m]	DC	GEOST
2832.0	[m]	DC	GEOST
2841.0	[m]	DC	GEOST
2847.0	[m]	DC	GEOST
2859.0	[m]	DC	GEOST
2868.0	[m]	DC	GEOST
2874.0	[m]	SWC	STATO
2882.0	[m]	SWC	STATO
2889.5	[m]	SWC	STATO
2895.0	[m]	DC	GEOST
2898.0	[m]	DC	GEOST
2907.0	[m]	DC	GEOST
2916.0	[m]	DC	GEOST
2919.0	[m]	DC	GEOST

Litostratigrafi



Topp Dyb [mMD RKB]	Litostrat. enhet
402	NORDLAND GP
402	NAUST FM
1368	KAI FM
1592	HORDALAND GP
1592	BRYGGE FM
1858	ROGALAND GP
1858	TARE FM
1915	TANG FM
1951	SHETLAND GP
1951	SPRINGAR FM
2131	NISE FM
2394	CROMER KNOLL GP
2394	LYR FM
2407	VIKING GP
2407	SPEKK FM
2413	MELKE FM
2574	FANGST GP
2574	GARN FM
2610	NOT FM
2617	ILE FM
2657	BÅT GP
2657	TOFTE FM
2712	TILJE FM
2791	ÅRE FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
1732	pdf	0.43

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
1732_1	pdf	1.82
1732_2	pdf	1.33





Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
1732_6608_10_3_COMPLETION_REPORT_AND_LOG	pdf	83.38

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsventil størrelse [mm]
1.0	2617	2648	23.4

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				98

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstygde rel. luft	GOR [m3/m3]
1.0	1250	102500	0.860	0.650	82

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL GR	646	2871
CDL CNL GR	1575	2914
DIFL ACL ZDL GR	863	1587
DIFL DAC GR	1574	2555
DIPL MAC SL	2430	2915
DIPLOG GR	1900	2555
DLL MLL GR	2539	2800
FMT HP GR	2498	2862
HRDIP GR	2563	2905
MWD	472	2920
SWC	894	2901





VSP	1240	2900
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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	466.0	36	466.0	0.00	LOT
INTERM.	20	863.0	26	863.0	1.40	LOT
INTERM.	13 3/8	1574.0	17 1/2	1574.0	1.85	LOT
INTERM.	9 5/8	2542.0	12 1/4	2542.0	1.97	LOT
LINER	7	2921.0	8 1/2	2921.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1250	1.20	22.0		WATER BASED	
1595	1.34	22.0		WATER BASED	
1803	1.60	35.0		WATER BASED	
1940	1.60	25.0		WATER BASED	
1960	1.60	33.0		WATER BASED	
2053	1.60	35.0		WATER BASED	
2362	1.60	36.0		WATER BASED	
2499	1.60	26.0		WATER BASED	
2555	1.60	28.0		WATER BASED	
2562	1.20	25.0		WATER BASED	
2574	1.20	23.0		WATER BASED	
2627	1.20	21.0		WATER BASED	
2627	1.20	24.0		WATER BASED	
2920	1.20	24.0		WATER BASED	

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]
1732 Formation pressure (Formasjonstrykk)	pdf	0.28

