



Generell informasjon

Brønnbane navn	31/2-17 S
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	TROLL
Funn	31/2-1 (Troll Vest)
Brønn navn	31/2-17
Seismisk lokalisering	NH-8901- LINJE 794 & SP. 1404
Utvinningstillatelse	054
Boreoperatør	Norsk Hydro Produksjon AS
Boretillatelse	709-L
Boreinnretning	TRANSOCEAN 8
Boredager	24
Borestart	28.12.1991
Boreslutt	20.01.1992
Frigitt dato	20.01.1994
Publiseringsdato	06.06.2006
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	SOGNEFJORD FM
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	FENSFJORD FM
Avstand, boredekk - midlere havflate [m]	24.0
Vanndybde ved midlere havflate [m]	341.0
Totalt målt dybde (MD) [m RKB]	2220.0
Totalt vertikalt dybde (TVD) [m RKB]	1705.0
Maks inklinasjon [°]	55.8
Temperatur ved bunn av brønnbanen [°C]	80
Eldste penetrerte alder	MIDDLE JURASSIC



Eldste penetrerte formasjon	FENSFJORD FM
Geodetisk datum	ED50
NS grader	60° 52' 57.08" N
ØV grader	3° 27' 5.79" E
NS UTM [m]	6749946.42
ØV UTM [m]	524516.87
UTM sone	31
NPDID for brønnbanen	1885

Brønnhistorie

**General**

Well bores 31/2-17 S, -A, and -B were drilled on the north-western periphery of the Troll West gas and oil discovery. The objective was to obtain the thickness of the oil zone and reservoir properties in the "Intermediate Area". Well bores 31/2-17 S and 31/2-17 A are located on each side of a fault subdividing the Intermediate Area into two main compartments. Well 31/2-17 S is located on the eastern side of the fault. The side track 31/2-17 A was turned 180 degrees and landed on the western side of the fault. Well 31/2-17 B was side-tracked from well 31/2-17 A and drilled horizontally to a position about 5 m above the oil water contact.

Operations and results

All three well bores were drilled with the semi-submersible installation Transocean 8 from the same wellhead location. Operations commenced with spud of 31/2-17 S on 28 December 1991 and ended with temporary abandonment of 31/2-17 B on 14 February 1992.

Well 31/2-17 S was drilled to TD at 2220 m in the Middle Jurassic Fensfjord Formation. No significant technical problem occurred in the well bore. The well bore was drilled with sea water and hi-vis pills down to 921 m and with KCl/brine/PHPA mud from 921 m to TD. One and a half m of Draupne Formation was penetrated at 1870 m. The Sognefjord Formation reservoir was encountered with gas at 1871.5 m. The Gas-Oil-Contact was penetrated at 1972 m (1544.2 m TVD MSL) and the Oil-Water-Contact was penetrated at 2011 m (1565.8 m TVD MSL), both contacts in the Heather Formation. Six cores were taken. Core one and two and the upper part of core three were cut in the Sognefjord Formation. The rest of the cores were cut in the Heather B Formation. No fluid sample was taken.

Well 31/2-17 A was kicked off from 31/2-17 S at 909 m and drilled to TD at 1924 m in the Middle Jurassic Fensfjord Formation. No significant technical problem occurred. The well bore was drilled with KCl/brine/PHPA mud from kick-off to 1012 m and with oil based mud from 1012 m to TD. Seven m of Draupne Formation was penetrated at 1681.5 m. The Sognefjord Formation reservoir was encountered with gas at 1688.5 m. The Gas-Oil-Contact was penetrated at 1725.4 m (1543.0 m TVD MSL) in the Sognefjord Formation. The Oil-Water-Contact was penetrated at 1746.5 m (1558.1 m TVD MSL) also in the Sognefjord Formation. Five cores were taken. Core one, two, three and the upper part of core four were cut in the Sognefjord Formation. Core no five was cut in the Heater Formation. No fluid sample was taken.

Well 31/2-17 B was kicked off from 31/2-17 A at 1645 m. The well angle was built up to approximately 90 degrees and was drilled to TD at 1838 m after 147 m nearly horizontal drilling in the Sognefjord Formation gas zone. The junk bonnet from the 9 5/8" liner running was accidentally left in the hole and 2 days were spent fishing for it, otherwise no significant technical problem occurred in this hole. The well bore was drilled with oil-based mud from kick-off to TD. Five m of Draupne Formation was penetrated at 1686 m. The Sognefjord Formation reservoir was encountered with gas at 1691 m. As expected no GOC was encountered, but the GOC is assumed to be the same as in well bore 31/2-17 A. One horizontal core (2.8 m) was taken at TD. Only MWD logs were run. No fluid sample was taken.

31/2-17 S and 31/2-17A were permanently abandoned, while well 31/2-17 B was temporary plugged and suspended for later re-entry. The wells were classified as oil and gas appraisals.

Testing

No drill stem test was performed in the well bores.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
930.00	2220.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1877.0	1912.0	[m]
2	1912.0	1946.8	[m]
3	1947.0	1977.8	[m]
4	1977.8	1984.7	[m]
5	1993.0	2012.0	[m]
6	2016.0	2022.3	[m]

Total kjerneprøve lengde [m]	132.8
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



1877-1882m



1882-1887m



1887-1892m



1892-1897m



1897-1902m



1902-1907m



1907-1912m



1912-1817m



1817-1922m



1922-1927m



1932-1937m



1937-1942m



1942-1946m



1947-1952m



1952-1957m



1957-1962m



1962-1967m



1967-1972m



1972-1977m



1977-1981m



1981-1994m



1994-1999m



1999-2004m



2004-2009m



2009-2017m



2017-2022m



2022-2023m

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
365	NORDLAND GP
803	HORDALAND GP
921	NO FORMAL NAME
1028	NO FORMAL NAME
1540	ROGALAND GP
1540	BALDER FM
1603	SELE FM
1676	LISTA FM
1856	VÅLE FM



1870	VIKING GP
1870	DRAUPNE FM
1872	SOGNEFJORD FM
1957	HEATHER FM
2180	FENSFJORD FM

Dokumenter - eldre Sökkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
1885_01_WDSS_General_Information	pdf	0.40
1885_02_WDSS_completion_log	pdf	0.14

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
1885_31_2_17_S_COMPLETION_REPORT_AND_LOG	pdf	22.76

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
DLL MSFL DSI SP GR AMS	1828	2021
FMI GR	1838	2190
GYRO AMS	1000	2200
LDL CNL GR AMS	364	2222
MDT GR AMS	1907	2047
MWD - GR CDR DIR	451	525
MWD - GR CDR DIR	1841	2220
MWD - GR RES S/N DIR	364	452
MWD - GR RES S/N DIR	528	1825
VSP 1ST	900	1100
VSP 4ST	1100	1810

Foringsrør og formasjonsstyrketester





Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 14.5.2024 - 01:46

Type utforing	Utforing diam. [tommer]	Utforing dybde [m]	Brønnbane diam. [tommer]	Brønnbane dyp [m]	LOT/FIT slam eqv. [g/cm3]	Type formasjonstest
CONDUCTOR	30	451.5	36	452.0	0.00	LOT
INTERM.	18 5/8	906.0	24	921.0	1.54	LOT
INTERM.	9 5/8	1827.0	12 1/4	1830.0	1.41	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
365	1.20	19.0		WATER BASED	
453	1.20	19.0		WATER BASED	
454	1.20	19.0		WATER BASED	
495	1.07	13.0		WATER BASED	
604	1.20	20.0		WATER BASED	
843	1.50	14.0		WATER BASED	
850	1.34	25.0		WATER BASED	
921	1.30	19.0		WATER BASED	
1070	1.30	24.0		WATER BASED	
1514	1.36	23.0		WATER BASED	
1775	1.34	25.0		WATER BASED	
1841	1.36	23.0		WATER BASED	
1912	1.25	22.0		WATER BASED	
1978	1.25	20.0		WATER BASED	
2016	1.25	21.0		WATER BASED	
2117	1.25	22.0		WATER BASED	
2220	1.26	24.0		WATER BASED	