



Generell informasjon

Brønnbane navn	31/2-17 A
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	716-L
Boreinnretning	TRANSOCEAN 8
Boredager	12
Borestart	20.01.1992
Boreslutt	31.01.1992
Frigitt dato	31.01.1994
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
Avstand, boredekk - midlere havflate [m]	24.0
Vanndybde ved midlere havflate [m]	341.0
Totalt målt dybde (MD) [m RKB]	1924.0
Totalt vertikalt dybde (TVD) [m RKB]	1712.0
Temperatur ved bunn av brønnbanen [°C]	85
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	1898

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]
1230.00	1922.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1703.0	1710.3	[m]
2	1710.5	1714.7	[m]
3	1714.5	1740.6	[m]
4	1740.6	1745.4	[m]
5	1756.0	1782.3	[m]

Total kjerneprøve lengde [m]	68.7
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



1703-1707m



1707-1710m



1710-1714m



1714-1715m



1714-1718m



1718-1722m



1722-1726m



1726-1730m



1730-1734m



1734-1738m



1738-1740m



1741-1745m



1745-1746m



1756-1760m



1760-1764m



1764-1768m



1768-1772m



1772-1776m



1776-1780m



1780-1782m

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
365	NORDLAND GP
803	HORDALAND GP
1412	ROGALAND GP
1412	BALDER FM
1454	SELE FM
1501	LISTA FM
1667	VÅLE FM
1682	VIKING GP
1682	DRAUPNE FM
1689	SOGNEFJORD FM
1756	HEATHER FM
1895	FENSFJORD FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
1898_1	pdf	1.26

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter





Dokument navn	Dokument format	Dokument størrelse [KB]
1898_01_WDSS_General_Information	pdf	0.36
1898_02_WDSS_completion_log	pdf	0.12

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
1898_31_2_17_A_COMPLETION_REPORT_AND_LOG	pdf	22.76

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
DIT-E LSS GR AMS	1643	1922
GYRO	364	1630
GYRO AMS	1000	2200
LDT CNT GR AMS	875	1922
MWD - GR CDR DIR	1546	1652
MWD - GR CDR DIR	1703	1924
MWD - GR RES S/N DIR	906	1546
MWD - GR RES S/N DIR	1655	1703
SDT CCL GR AMS	0	0
VSP	740	1910

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	451.0	36	452.0	0.00	LOT
INTERM.	18 5/8	906.0	26	921.0	0.00	LOT
INTERM.	13 3/8	1642.0	17 1/2	1924.0	1.33	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
926	1.35	49.0		OIL BASED	





1546	1.37	50.0		OIL BASED	
1580	1.25	35.0		OIL BASED	
1652	1.37	44.0		OIL BASED	
1703	1.26	31.0		OIL BASED	
1755	1.26	29.0		OIL BASED	
1847	1.26	29.0		OIL BASED	
1924	1.26	35.0		OIL BASED	