



Generell informasjon

Brønnbane navn	30/8-3
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	30/8-3
Brønn navn	30/8-3
Seismisk lokalisering	NH 9304- INLINE 2100 & CROSSLINE 2372
Utvinningstillatelse	190
Boreoperatør	Norsk Hydro Produksjon AS
Boretillatelse	914-L
Boreinnretning	WEST VANGUARD
Boredager	54
Borestart	13.11.1997
Boreslutt	05.01.1998
Frigitt dato	05.01.2000
Publiseringsdato	01.08.2010
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS/CONDENSATE
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	NESS FM
Avstand, boredekk - midlere havflate [m]	22.0
Vanndybde ved midlere havflate [m]	92.5
Totalt målt dybde (MD) [m RKB]	3720.0
Totalt vertikalt dybde (TVD) [m RKB]	3718.0
Maks inklinasjon [°]	7.4
Temperatur ved bunn av brønnbanen [°C]	135
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	DRAKE FM
Geodetisk datum	ED50
NS grader	60° 26' 40.54" N



ØV grader	2° 38' 58.02" E
NS UTM [m]	6701135.31
ØV UTM [m]	480709.17
UTM sone	31
NPDID for brønnbanen	3246

Brønnhistorie



General

Well 30/8-3 was drilled just west of the Oseberg Sør Field in the North Sea. The primary objective of the well was the deltaic sands of the Tarbert Formation in the Brent Group. Draupne Formation wedge sand was a secondary objective. Furthermore, the well was placed in a position that should penetrate across the "A-East 1/A-East 3 fault zone in order to get cores and pressure data to evaluate fault seal capacity.

Operations and results

Wildcat well 30/8-3 was spudded with the semi-submersible installation West Vanguard on 13 November 1997 and drilled to TD at 3720 m in the Early Jurassic Drake Formation. Due to shallow gas warnings a 9 7/8" pilot hole was drilled from 214 to 440 m. No gas was observed, and the hole opened up to 17 1/2". The non-productive rig time was 35% of the total for this well. WOW caused 4 days down time. Down hole motor and bit was lost in the 121/4" section. Fishing took ca 10 hours. Unstable hole conditions with mud losses and gains were experienced in the interval 3263 to 3284 m. The hole was sealed off by squeezing cement into the formation and this cured the problem. There were also problems with the TD logging due to tight/sticky hole, lost MDT tool, and erratic signals from the tool causing ca 2.5 days fishing and repairs. The well was drilled with spud mud down to 1588 m, and with KCl/Polymer mud from 1588 m to 3720 m.

There were no indications of reservoir deposits in the Viking Group section. The Tarbert 2 reservoir was penetrated at 3333.0 m, one meter deeper than prognosed. A total of 64.5 m net reservoir was calculated between 3333 m and 3419 m, giving a net to gross ratio of 0.75, somewhat higher than expected. The Tarbert 2 reservoir was dry, with very weak shows of hydrocarbons. A Petroleum Geochemistry study concluded that there were no indications of migrated hydrocarbons within the Tarbert 2 reservoir section. The reservoir properties were moderately good. The average porosity was 17.3 %, slightly higher than prognosed. The majority of the permeability measurements were between 1 mD and 100 mD. The Ness Formation channels, 18 m net, contained gas/condensates. No fluid contacts could be established.

Well 30/8-3 showed about 20 bar overpressure in Tarbert 2, indicating a main pressure barrier between the A-Main and the A-East structures.

Two cores were cut from 3342 to 3435 m in the Tarbert 2 reservoir section. A third core was cut from 3531 to 3559 m to cover a prognosed fault. From FMS data it was later observed that the fault cut the well in a deeper position, between 3645 m and 3659 m. Two MDT fluid samples were collected from 3601.7 m and 3635.3 m.

The well was permanently abandoned on 5 January 1998 as a gas/condensate discovery.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1600.00	3720.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3342.0	3378.9	[m]
2	3379.0	3435.0	[m]
3	3531.0	3559.2	[m]

Total kjerneprøve lengde [m]	121.0
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



3342-3347m



3347-3352m



3352-3357m



3357-3362m



3362-3367m



3367-3372m



3372-3377m



3377-3378m



3379-3384m



3384-3389m



3389-3394m



3394-3399m



3399-3404m



3404-3409m



3409-3414m



3414-3419m



3419-3424m



3424-3429m



3429-3434m



3434-3435m



3531-3536m



3536-3541m



3541-3546m



3546-3551m



3551-3556m



3556-3559m

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
115	NORDLAND GP
609	UTSIRA FM
885	NO FORMAL NAME
915	HORDALAND GP
915	SKADE FM
974	NO FORMAL NAME
1077	NO FORMAL NAME
1142	NO FORMAL NAME
1538	GRID FM
1558	NO FORMAL NAME
2111	ROGALAND GP
2111	BALDER FM
2180	SELE FM
2239	LISTA FM
2389	VÅLE FM
2431	SHETLAND GP
2431	HARDRÅDE FM
2454	JORSALFARE FM
2649	KYRRE FM
3044	TRYGGVASON FM
3141	SVARTE FM
3189	CROMER KNOLL GP



3189	MIME FM
3192	VIKING GP
3192	DRAUPNE FM
3197	HEATHER FM
3252	BRENT GP
3252	TARBERT FM
3473	NESS FM
3659	UNDIFFERENTIATED
3663	DUNLIN GP
3663	DRAKE FM

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
3246_30_8_3_COMPLETION_REPORT	pdf	6.17

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CST GR	3134	3250
CST GR	3294	3712
FMS NGT ACTS	3249	3712
GR DSI ACTS	3007	3714
HALS TLD HGNS ACTS	3719	3249
MDT GR AMS	3335	3340
MDT GR AMS	3338	3635
MDT GR AMS	3495	3510
MDT GR AMS	3545	3660
VELOCITY	3000	3750

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	212.0	36	214.0	0.00	LOT
PILOT HOLE		440.0	9 7/8	440.0	0.00	LOT
SURF.COND.	13 3/8	1581.0	17 1/2	1588.0	0.00	LOT





INTERM.	9 5/8	3249.0	12 1/4	3260.0	0.00	LOT
OPEN HOLE		3720.0	8 1/2	3720.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
139	1.05			water based	
214	1.05			water based	
350	1.05			water based	
440	1.05			water based	
740	1.05			water based	
1588	1.20			water based	
2123	1.45	34.0		water based	
2240	1.45	35.0		water based	
2500	1.43	32.0		water based	
3045	1.45	37.0		water based	
3179	1.45	36.0		water based	
3260	1.46	34.0		water based	
3284	1.62	36.0		water based	
3308	1.62	39.0		water based	
3342	1.62	37.0		water based	
3531	1.32	23.0		water based	
3720	1.37	23.0		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]
3246 Formation pressure (Formasjonstrykk)	pdf	0.24

