Generell informasjon

Brønnbane navn	34/10-33 A
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	GULLFAKS SØR
Funn	34/10-2 Gullfaks Sør
Brønn navn	34/10-33
Seismisk lokalisering	ST 8134 - 156 CELLEPKT 296
Utvinningstillatelse	050
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	598-L
Boreinnretning	WEST DELTA
Boredager	51
Borestart	15.12.1988
Boreslutt	03.02.1989
Frigitt dato	03.02.1991
Publiseringsdato	01.01.2012
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	INTRA DRAUPNE FM SS
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	BRENT GP
Avstand, boredekk - midlere havflate [m]	29.0
Vanndybde ved midlere havflate [m]	134.0
Totalt målt dybde (MD) [m RKB]	3851.0
Totalt vertikalt dybde (TVD) [m RKB]	3640.0
Maks inklinasjon [°]	48.8
Temperatur ved bunn av brønnbanen [°C]	91
Eldste penetrerte alder	MIDDLE JURASSIC

Eldste penetrerte formasjon	RANNOCH FM
Geodetisk datum	ED50
NS grader	61° 7' 34.44'' N
ØV grader	2° 12' 57.1'' E
NS UTM [m]	6777262.00
ØV UTM [m]	457756.18
UTM sone	31
NPDID for brønnbanen	1365

Brønnhistorie

General

Well 34/10-33 A is a sidetrack from appraisal well 34/10-33, which found oil in a down-to situation in the Gullfaks South Discovery. The main objectives were to locate the gas-oil contact in the Tarbert Formation and the oil-water contact, which was not seen in the primary well. Further objectives were to acquire more pressure data over the reservoir in order to evaluate if the pressure shift in the oil zone seen in the primary well could be explained by tight faults and/or a lateral continuous barrier within in the Ness Formation, and also to test if the Tarbert and Ness formations were in a common pressure regime. Finally, the well should provide water samples from the Brent Group and gather information for an optimal placing of a horizontal test well as a new sidetrack from well 34/10-33.

Operations and results

Well 34/10-33A was kicked off on 15 December 1988 from the vertical well 34/10-33 at 2698 m. The sidetrack was drilled to TD at 3851 m in the Middle Jurassic Rannoch Formation using the semi-submersible installation West Delta.

Due to severe technical problems during drilling, the logging programme was not fulfilled, and several of the well objectives could not be met. The well was drilled with gel/lignosulphonate/lignite mud from kick-off to TD.

The Brent Group was encountered at 3347 m. The logs showed a gas/oil contact at 3427 m (3295 m TVD MSL) in the Tarbert Formation and suggested an oil/water contact at ca 3625 m (3430 m TVD MSL) in the Ness Formation. In addition the well encountered a thin hydrocarbon bearing sand layer 3040 m (3001 m TVD MSL) in the Draupne Formation.

No cores were cut in this well and no wire line pressure points or fluid samples were acquired due to the technical difficulties.

The well bore was plugged back and abandoned on 3 February 1989 as an oil and gas appraisal.

Testing

No drill stem test was performed.

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
3070.0	[m]	DC	GEOCH
3080.0	[m]	DC	GEOCH
3090.0	[m]	DC	GEOCH
3100.0	[m]	DC	GEOCH
3110.0	[m]	DC	GEOCH
3120.0	[m]	DC	GEOCH
3130.0	[m]	DC	GEOCH
3140.0	[m]	DC	GEOCH
3150.0	[m]	DC	GEOCH
3160.0	[m]	DC	GEOCH
3170.0	[m]	DC	GEOCH
3180.0	[m]	DC	GEOCH
3190.0	[m]	DC	GEOCH
3200.0	[m]	DC	GEOCH
3210.0	[m]	DC	GEOCH
3220.0	[m]	DC	GEOCH
3230.0	[m]	DC	GEOCH
3240.0	[m]	DC	GEOCH
3250.0	[m]	DC	GEOCH
3260.0	[m]	DC	GEOCH
3270.0	[m]	DC	GEOCH
3280.0	[m]	DC	GEOCH
3290.0	[m]	DC	GEOCH
3300.0	[m]	DC	GEOCH
3310.0	[m]	DC	GEOCH
3320.0	[m]	DC	GEOCH
3330.0	[m]	DC	GEOCH
3340.0	[m]	DC	GEOCH
3351.0	[m]	DC	GEOCH

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
163	NORDLAND GP
915	UTSIRA FM
956	NO FORMAL NAME
980	HORDALAND GP
1035	NO FORMAL NAME

1145	NO FORMAL NAME
1253	NO FORMAL NAME
1520	NO FORMAL NAME
1568	NO FORMAL NAME
1616	NO FORMAL NAME
1827	ROGALAND GP
1827	BALDER FM
1907	LISTA FM
2055	SHETLAND GP
2055	JORSALFARE FM
2350	KYRRE FM
3030	CROMER KNOLL GP
3030	MIME FM
3034	VIKING GP
3034	DRAUPNE FM
3077	HEATHER FM
3347	BRENT GP
3347	TARBERT FM
3451	NESS FM
3747	ETIVE FM
3758	RANNOCH FM

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
1365_01_WDSS_General_Information	pdf	0.21
1365_02_WDSS_completion_log	pdf	0.17

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
1365_34_10_33_A_Completion_log	pdf	1.08
1365_34_10_33_A_Completion_report	pdf	35.11

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
ACBL VDL GR	2595	3330
CDL CN CAL SPL	2703	3213
CDL CN CAL SPL	2990	3075
DIFL ACL GR	2703	3852
DLL MLL GR	2703	3217
FMT GR	3039	3041
MWD - GR RES NEU DEN	2696	3476

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	225.0	36	226.0	0.00	
SURF.COND.	20	459.0	26	466.0	1.43	LOT
INTERM.	13 3/8	1828.0	17 1/2	1844.0	1.53	LOT
		2698.0		2698.0	1.83	LOT
LINER	7	3340.0	8 1/2	3851.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
2696	1.47	15.0	6.5	WATER BASED	19.12.1988
2704	1.47	40.0	13.5	WATER BASED	28.12.1988
2761	1.47	28.0	8.0	WATER BASED	28.12.1988
2823	1.47	20.0	7.0	WATER BASED	28.12.1988
2853	1.47	21.0	8.0	WATER BASED	28.12.1988
2883	1.26	13.0	4.5	WATER BASED	29.12.1988
2952	1.26	17.0	4.0	WATER BASED	02.01.1989
3025	1.33	18.0	8.5	WATER BASED	02.01.1989
3105	1.39	17.0	7.5	WATER BASED	02.01.1989
3169	1.41	21.0	11.0	WATER BASED	02.01.1989
3219	1.45	22.0	8.5	WATER BASED	03.01.1989
3276	1.45	19.0	8.5	WATER BASED	04.01.1989
3310	1.45	20.0	7.0	WATER BASED	05.01.1989
3320	1.50	29.0	12.0	WATER BASED	19.01.1989
3330	1.60	25.0	7.0	WATER BASED	20.01.1989

3340	1.60	23.0	6.5	WATER BASED	25.01.1989
3343	1.60	24.0	6.5	WATER BASED	24.01.1989
3345	1.60	25.0	6.0	WATER BASED	24.01.1989
3370	1.48	22.0	6.5	WATER BASED	06.01.1989
3470	1.46	20.0	5.5	WATER BASED	09.01.1989
3511	1.44	16.0	4.5	WATER BASED	09.01.1989
3745	1.44	17.0	4.5	WATER BASED	09.01.1989
3747	1.44	17.0	4.5	WATER BASED	10.01.1989
3851	1.44	19.0	4.0	WATER BASED	11.01.1989
3851	1.44	17.0	4.0	WATER BASED	18.01.1989
3851	1.44	20.0	3.8	WATER BASED	13.01.1989

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]
1365_Formation_pressure_(Formasjonstrykk)	pdf	0.22