

General information

Wellbore name	34/10-33 A
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	GULLFAKS SØR
Discovery	34/10-2 Gullfaks Sør
Well name	34/10-33
Seismic location	ST 8134 - 156 CELLEPKT 296
Production licence	050
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	598-L
Drilling facility	WEST DELTA
Drilling days	51
Entered date	15.12.1988
Completed date	03.02.1989
Release date	03.02.1991
Publication date	01.01.2012
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL/GAS
Discovery wellbore	NO
1st level with HC, age	LATE JURASSIC
1st level with HC, formation	INTRA DRAUPNE FM SS
2nd level with HC, age	MIDDLE JURASSIC
2nd level with HC, formation	BRENT GP
Kelly bushing elevation [m]	29.0
Water depth [m]	134.0
Total depth (MD) [m RKB]	3851.0
Final vertical depth (TVD) [m RKB]	3640.0
Maximum inclination [°]	48.8
Bottom hole temperature [°C]	91
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	RANNOCH FM
Geodetic datum	ED50
NS degrees	61° 7' 34.44" N
EW degrees	2° 12' 57.1" E

NS UTM [m]	6777262.00
EW UTM [m]	457756.18
UTM zone	31
NPDID wellbore	1365

Wellbore history

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.

Palyнологical slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
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

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
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

Documents - older Norwegian Offshore Directorate WDSS reports and other related documents

Document name	Document format	Document size [MB]
1365_01_WDSS_General_Information	pdf	0.21
1365_02_WDSS_completion_log	pdf	0.17

Documents - reported by the production licence (period for duty of secrecy expired)

Document name	Document format	Document size [MB]
1365_34_10_33_A_Completion_log	pdf	1.08
1365_34_10_33_A_Completion_report	pdf	35.11

Logs

Log type	Log top depth [m]	Log bottom depth [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

Casing and leak-off tests

Casing type	Casing diam. [inch]	Casing depth [m]	Hole diam. [inch]	Hole depth [m]	LOT/FIT mud eqv. [g/cm3]	Formation test type
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	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
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

Pressure plots

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

Document name	Document format	Document size [MB]
1365 Formation pressure (Formasjonstrykk)	pdf	0.22

