

**General information**

Wellbore name	34/10-19
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	GULLFAKS
Discovery	34/10-1 Gullfaks
Well name	34/10-19
Seismic location	ST S3D - 206 SP 293
Production licence	050
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	392-L
Drilling facility	ROSS ISLE
Drilling days	63
Entered date	05.10.1983
Completed date	06.12.1983
Release date	06.12.1985
Publication date	02.12.2014
Purpose - planned	APPRAISAL
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	22.0
Water depth [m]	193.0
Total depth (MD) [m RKB]	2218.0
Final vertical depth (TVD) [m RKB]	2218.0
Maximum inclination [°]	3.5
Bottom hole temperature [°C]	70
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	HEGRE GP
Geodetic datum	ED50
NS degrees	61° 11' 10.86" N
EW degrees	2° 15' 30.55" E
NS UTM [m]	6783931.44
EW UTM [m]	460128.36
UTM zone	31
NPDID wellbore	33



Wellbore history

General

Well 34/10-19 was drilled to investigate the southern section of the Gullfaks Phase II area. The primary objective was to penetrate the Cook sandstone above the oil water contact at 2118 m seen in well 34/10-9, and to improve the understanding of the reserve distribution in this part of the Gullfaks field. Secondary objective was the Statfjord sandstone.

Operations and results

Appraisal well 34/10-19 was spudded with the semi-submersible installation Ross Isle on 5 October 1983 and drilled to TD at 2218 m in the Triassic Hegre Formation. Shallow gas was encountered in a sand at 332 to 338 m. A 16" liner was required to stop gas flow between 20" and 30" casings. Several drilling breaks occurred in the 12 1/4" hole and lost circulation occurred in the 8 1/2" hole. The well was drilled with gel/seawater down to 8978 m, with gel/seawater/hi-vis pills from 978 m to 1494 m, and with gel/lignosulphonate/lignite mud from 1494 m to TD.

The upper sandstone part of the Cook formation (unit C3 and C2) was missing due to faulting and erosion. The lower Cook C1 unit was penetrated at 1779 m. This unit consists of dominantly claystones and it was water bearing. The sandstones of the Statfjord Formation were water bearing. Trace shows were recorded in the Hordaland Group on claystones from 960 m to 120 m and on claystone and on limestone from 1340 m to 1470 m. Trace to fair shows on siltstone, claystone and minor sandstones were recorded intermittently below 1470 m and down to 1861 m. No trace of hydrocarbons was seen below this depth.

Three cores were cut; one in the interval from 1763 in the Cromer Knoll Group to 1781.3 m in the Cook Formation, and two in the interval 1847 to 1874.8 m in the Jurassic Dunlin Group. No wire line fluid samples were taken.

The well was permanently abandoned on 6 December 1983 as a dry well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
300.00	2218.00

Cuttings available for sampling?	YES
----------------------------------	-----

Cores at the Norwegian Offshore Directorate



Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	1763.0	1780.7	[m]
2	1847.0	1855.7	[m]
3	1856.5	1874.4	[m]

Total core sample length [m]	44.3
Cores available for sampling?	YES

Core photos



1763-1767m



1767-1771m



1771-1775m



1775-1779m



1779-1849m



1849-1853m



1853-1857m



1857-1861m



1861-1865m



1865-1869m



1869-1873m



1873-1875m

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
215	NORDLAND GP
930	UTSIRA FM
935	HORDALAND GP
1470	ROGALAND GP



1470	BALDER FM
1532	LISTA FM
1660	SHETLAND GP
1776	CROMER KNOLL GP
1779	COOK FM
1830	BURTON FM
1840	AMUNDSEN FM
2005	STATFJORD GP
2188	HEGRE GP

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

Document name	Document format	Document size [MB]
33 01 WDSS General Information	pdf	0.18
33 02 WDSS completion log	pdf	0.22

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

Document name	Document format	Document size [MB]
33 34 10 19 Completion log	pdf	1.33
33 34 10 19 Completion Report	PDF	30.23
33 34 10 19 Core Analysis Report	pdf	0.55
33 34 10 19 Petrofysisk Evaluering	pdf	1.21
33 34 10 19 Stratigraphical Paleontological	pdf	11.66

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL GR CCL	215	1690
HDT	1481	1700
ISF BHC GR	1688	1846
ISF BHC MSFL GR	1481	1700
ISF LSS MSFL GR	214	2216
LDL CNL GR	288	2217
MSFL CNL GR	1687	1874
RFT	1777	2185





RFT	1846	1863
SHDT	1680	2216
TEMP	225	953
VELOCITY	215	2216

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	288.0	36	289.5	0.00	LOT
SURF.COND.	20	969.0	26	978.0	1.56	LOT
LINER	16	1073.0	19 3/4	1073.0	1.59	LOT
INTERM.	13 3/8	1483.0	17 1/2	1494.0	1.86	LOT
INTERM.	9 5/8	1689.0	12 1/4	1700.0	2.06	LOT
OPEN HOLE		2218.0	8 1/2	2218.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
310	1.06	53.0		waterbased	
550	1.10	44.0		waterbased	
1050	1.10	42.0		waterbased	
1370	1.30	46.0		waterbased	
1640	1.77	49.0		waterbased	
1940	1.85	58.0		waterbased	

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]
33 Formation pressure (Formasjonstrykk)	pdf	0.21

