General information

Wellbore name	33/9-20 S
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	33/9-6 DELTA
Well name	33/9-20
Seismic location	MC3D-211/19 inline 2957& xline 2620
Production licence	037 D
Drilling operator	Wintershall Norge AS
Drill permit	1104-L
Drilling facility	MURCHISON A
Drilling days	47
Entered date	25.07.2006
Completed date	09.09.2006
Release date	09.09.2008
Publication date	18.12.2008
Purpose - planned	APPRAISAL
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	56.3
Water depth [m]	156.0
Total depth (MD) [m RKB]	5502.3
Final vertical depth (TVD) [m RKB]	3158.0
Maximum inclination [°]	64.8
Bottom hole temperature [°C]	119
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	ETIVE FM
Geodetic datum	ED50
NS degrees	61° 23' 48.26'' N
EW degrees	1° 44' 27.25'' E
NS UTM [m]	6807790.25
EW UTM [m]	432751.22
UTM zone	31
NPDID wellbore	4143

Wellbore history

General

Well 33/9-20 S (211/19-M75) was drilled from the Murchison Field (UK) into the Norwegian PL037D license. The objective was to test the Blåmann prospect at Brent Group level located east of the producing Murchison MR-segment. The reservoir quality was assumed to be moderate in the Tarbert/Ness Formations reservoir units, but excellent in the Etive Formations. A 65 m TVD oil column was expected.

Operations and results

Well 33/9-20 S was spudded from the Murchison Platform through slot 23 on 25 July 2006. It was sidetracked out of the 13 3/8" casing at ca 1387 m and drilled to TD at 5502 m (3158 m TVD) in the Middle Jurassic Etive Formation. The well was drilled with Versaclean UFG oil based mud all through.

The Base Cretaceous Unconformity was found 11 m TVD deeper than prognosed. The Heather shale was 30 m TVD thicker than prognosed and the top Tarbert Formation was found 44 m TVD deeper than prognosed. No hydrocarbons were encountered in the reservoir section even though the top Tarbert Formation was found 21 m TVD above the expected oil water contact. No shows are reported from the well.

The well was logged by MWD/LWD only; no logs were run on wire line. No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 9 September 2006 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]
3785.00	6092.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
212	NORDLAND GP
2047	ROGALAND GP
2047	BALDER FM
2141	LISTA FM

2503	VÅLE FM
2538	SHETLAND GP
5014	CROMER KNOLL GP
5014	RØDBY FM
5029	SOLA FM
5102	ÅSGARD FM
5169	MIME FM
5211	VIKING GP
5211	DRAUPNE FM
5319	HEATHER FM
5390	BRENT GP
5390	TARBERT FM
5427	NESS FM
5477	ETIVE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD LWD - POWERPULS	1387	1399
MWD LWD - POWERPULS ARC ADN	4907	5502
MWD LWD - POWERPULS ARC PD	1399	4907

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	13 3/8	1393.0	17 1/2	1395.0	1.61	LOT
INTERM.	9 5/8	4901.0	12 1/4	4907.0	0.00	LOT
OPEN HOLE		5501.0	8 1/2	5502.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1894	1.55		69.0	waterbased	
2493	1.55		69.0	waterbased	
2560	1.43		69.0	waterbased	
4449	1.56		57.0	waterbased	

5546	1.53		74.0	waterbased	