General information

Wellbore name	30/9-23
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	30/9-23
Seismic location	NH05M01-BIN-inline4656 & crossline 8456
Production licence	104
Drilling operator	StatoilHydro Petroleum AS
Drill permit	1265-L
Drilling facility	TRANSOCEAN WINNER
Drilling days	24
Entered date	29.07.2009
Completed date	21.08.2009
Release date	21.08.2011
Publication date	21.08.2011
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	26.0
Water depth [m]	114.0
Total depth (MD) [m RKB]	2872.0
Final vertical depth (TVD) [m RKB]	2872.0
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	DUNLIN GP
Geodetic datum	ED50
NS degrees	60° 27' 32.76'' N
EW degrees	2° 59' 7.64'' E
NS UTM [m]	6702699.70
EW UTM [m]	499199.97
UTM zone	31
NPDID wellbore	6182

Wellbore history

General

The 30/9-23 Quest well was drilled on the Bjørgvin Arch in the Northern North Sea, between the Oseberg, Oseberg Sør, and the Brage Fields. Four reservoir levels were expected, the Intra Draupne sands, Sognefjord Formation, Fensfjord Formation and Brent Group sands. The main objective of the 30/9-23 well was to prove a commercial hydrocarbon accumulation in any of these levels.

Operations and results

Wildcat well 30/9-23 was spudded with the semi-submersible installation Transocean Winner on 28 July 2009 and drilled to TD at 2873 m in Early Jurassic sediments of the Dunlin Group. A 9 7/8" pilot hole was drilled below the 30" casing from 189 m to 510 m. The hole was opened to 17 1/2" and drilled down to 1007 m before setting the 13 3/8" casing. Returns were to seabed above 13 3/8" casing. No shallow gas was observed by the ROV at the wellhead or by the MWD while drilling the 36" hole, the 9 7/8" pilot hole, and the 17 1/2" hole. The well was drilled with seawater and bentonite sweeps down to 1003 m, and with Glydril mud from 1003 m to TD.

The geological prognosis was relatively accurate. The Base Cretaceous Unconformity, top Draupne Formation, was penetrated at 2214 m. A thin Draupne sand was encountered, although not of the quality expected. Sognefjord sand was present as prognosed. Fensfjord sand was encountered at prognosed depth, but the interval was thicker and more fine-grained than expected. Brent was found as prognosed. The well proved a dry Quest prospect, in all 4 reservoir levels. The pressure measurements showed water gradients in all reservoirs. In the Fensfjord Formation no pressure measurements could be achieved, due to tight formation. Brent was depleted with 50 bars, most severe in the connective Oseberg and Etive reservoirs.

No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 19 August 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]
1005.00	2873.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
140	NORDLAND GP
666	UTSIRA FM

832	HORDALAND GP
1860	ROGALAND GP
1860	BALDER FM
1940	SELE FM
1990	LISTA FM
2113	VÅLE FM
2119	SHETLAND GP
2119	HARDRÅDE FM
2201	CROMER KNOLL GP
2201	RØDBY FM
2206	ÅSGARD FM
2214	VIKING GP
2214	DRAUPNE FM
2283	SOGNEFJORD FM
2338	HEATHER FM
2501	FENSFJORD FM
2668	HEATHER FM
2678	KROSSFJORD FM
2717	BRENT GP
2755	NESS FM
2806	ETIVE FM
2812	RANNOCH FM
2814	OSEBERG FM
2845	DUNLIN GP

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DSI XPT	929	2873
MWD LWD - ARCFVRES6 TELESCOPE	191	2092
MWD LWD - ARCVRES6 GVR6 TELESCOP	2092	2873
PEX HRLA	2082	2873

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	189.0	36	192.0	0.00	LOT
PILOT HOLE		510.0	9 7/8	510.0	0.00	LOT
SURF.COND.	13 3/8	997.0	17 1/2	1003.0	1.64	LOT
INTERM.	9 5/8	2082.0	12 1/4	2092.0	1.72	LOT
OPEN HOLE		2873.0	8 1/2	2873.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1003	1.35	24.0		Glydril	
1005	1.27	14.0		Glydril	
1300	1.37	18.0		Glydril	
1955	1.40	18.0		Glydril	
2092	1.43	20.0		Glydril	
2424	1.25	15.0		Glydril	
2873	1.25	16.0		Glydril	