General information

Wellbore name	34/8-8 R
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	VISUND
Discovery	34/8-1 Visund
Well name	34/8-8
Seismic location	NH-9001-3d:ROW 925 & COL.585
Production licence	120
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	730-L2
Drilling facility	POLAR PIONEER
Drilling days	22
Entered date	16.02.1993
Completed date	09.03.1993
Plugged and abondon date	09.03.1993
Release date	09.03.1995
Publication date	10.01.2012
Purpose - planned	APPRAISAL
Reentry	YES
Reentry activity	TESTING/PLUGGING
Content	OIL
Discovery wellbore	NO
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	BRENT GP
Kelly bushing elevation [m]	23.0
Water depth [m]	340.5
Total depth (MD) [m RKB]	3624.0
Final vertical depth (TVD) [m RKB]	3622.0
Maximum inclination [°]	6.5
Bottom hole temperature [°C]	130
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	LUNDE FM
Geodetic datum	ED50
NS degrees	61° 22' 46.19'' N
EW degrees	2° 28' 43.81'' E

NS UTM [m]	6805332.03
EW UTM [m]	472148.13
UTM zone	31
NPDID wellbore	2080

Wellbore history

General

Well 34/8-8 R is a re-entry of appraisal well 34/8-8 on the N-1 segment of the 34/8-1 Visund discovery on Tampen Spur in the Northern North Sea. The primary objective of well 34/8-8R was to determine the pressure regime and pressure gradient in the hydrocarbon bearing sands in Tarbert, Ness and Etive formations. The secondary objective was to determine the fluid system/composition and the possible presence of a gas oil contact in the Tarbert/Ness formations. The third objective was to investigate the mobility of oil and water down to the interpreted free water level (FWL)

Operations and results

Well 34/8-8 was re-entered on 16 February 1993 with the semi-submersible installation Polar Pioneer.

The well was drill stem tested. No significant problems occurred in the operations.

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

The well was permanently abandoned on 9 March 1993 as an oil appraisal.

Testing

Two drill stem tests were performed. In both tests production logging (PLT) was performed during the main flow.

DST 1 tested the interval 2960.2 to 2973.2 m in the Ness/Etive formations. The test sequence consisted of an initial and a cleanup flow/build-up period with down hole shut-in. The main flow with PLT was interrupted by poor weather conditions and the well was immediately killed. Only a limited amount of the surface sampling program was therefore accomplished. No down hole samples were collected. The test produced 775 Sm3 oil, 10600 Sm3 gas and 161 m3 water/day through a 12.7 mm choke in the cleanup flow. GOR was 137 Sm3/Sm3. The oil density was 0.852 g/cm3 and the gas gravity was 0.665 (air = 1) with 1.6% CO2 and 0.25 ppm H2S. Flowing BHP was 423.3 bar and flowing BHT was 112.3 deg C. The PLT results showed an effective OWC at 2971.5.

DST 2 tested the interval 2921 to 2950 in the Tarbert/Ness formations. The test sequence consisted of an initial and a cleanup flow/build-up period with down hole shut-in. After the cleanup build-up bottom hole sampling was accomplished with the well flowing on a low rate. Three out of five samples were good. The well was production logged (PLT) during the dual rate main flow period. The test produced 956 - 772 Sm3 oil, 147100 Sm3 gas and 0 m3 water/day through a 19.05 mm choke in the main flow. GOR was 164 - 191 Sm3/Sm3. The oil rate was steadily decreasing while the gas rate was relatively constant. Consequently, the GOR steadily increased during this period. The oil density was 0.844 g/cm3 and the gas gravity was 0.660 (air = 1) with 1.4% CO2 and 1.5 ppm H2S. Flowing BHP was 234.6 bar and flowing BHT was 112.4 deg C. No gas/oil contact was reported from the test.

After the main build-up with surface shut-in, a minifracture test was performed.

Oil samples at the Norwegian Offshore Directorate

Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
DST	TEST1	2973.20	2960.20		21.02.1993 - 12:45	YES
DST	TEST2	2950.00	2921.00		26.02.1993 - 13:25	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
364	NORDLAND GP
1115	UTSIRA FM
1164	NO FORMAL NAME
1190	HORDALAND GP
1368	NO FORMAL NAME
1401	NO FORMAL NAME
1527	NO FORMAL NAME
1559	NO FORMAL NAME
1829	ROGALAND GP
1829	BALDER FM
1873	LISTA FM
1998	SHETLAND GP
1998	JORSALFARE FM
2231	KYRRE FM
2877	CROMER KNOLL GP
2877	SOLA FM
2883	ÅSGARD FM
2900	VIKING GP
2900	DRAUPNE FM
2902	HEATHER FM
2921	BRENT GP
2921	TARBERT FM
2935	NESS FM
2967	ETIVE FM
3007	RANNOCH FM
3077	DUNLIN GP
3077	DRAKE FM
3122	COOK FM
3260	BURTON FM

3286	AMUNDSEN FM
3387	STATFJORD GP
3474	HEGRE GP
3474	LUNDE FM

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	2960	2973	12.7
2.0	2921	2950	19.0

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0	20.000		42.000	112
2.0	8.000		23.000	112

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0	775	106300	0.852	0.665	137
2.0	956	147100	0.844	0.660	164

Logs

Log type	Log top depth [m]	Log bottom depth [m]
BHS PLT	2915	2955
CBL VDL GR CCL	2600	3106
CCL	2921	2950
CCL	2986	3108
GR CCL	2773	2828
GR CCL	2800	2870
GR CCL	2800	2870
LDL CNL GR	2764	3282
PLT	2915	2955
PLT	2955	2985

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1000	1.47	12.0	9.0	WATER BASED	08.03.1993
1000	1.47	12.0	9.0	WATER BASED	10.03.1993
1000	1.47	12.0	9.0	WATER BASED	09.03.1993
2727	1.47	12.0	10.0	WATER BASED	08.03.1993
2877	1.63	15.0	14.0	WATER BASED	01.03.1993
2877	1.63	15.0	14.0	WATER BASED	01.03.1993
2877	1.63	15.0	14.0	WATER BASED	01.03.1993
2877	1.63	15.0	14.0	WATER BASED	02.03.1993
2877	1.63	15.0	14.0	WATER BASED	03.03.1993
2894	1.63	15.0	15.0	WATER BASED	08.03.1993
2909	1.63	20.0	15.0	WATER BASED	23.02.1993
2909	1.63	15.0	15.0	WATER BASED	23.02.1993
2909	1.63	17.0	15.0	WATER BASED	23.02.1993
2909	1.63	14.0	14.0	WATER BASED	24.02.1993
2957	1.63	15.0	15.0	WATER BASED	24.02.1993
2957	1.63	15.0	14.0	WATER BASED	26.02.1993
2957	1.63	14.0	14.0	WATER BASED	04.03.1993
2957	1.63	14.0	13.0	WATER BASED	08.03.1993
2957	1.63	14.0	13.0	WATER BASED	08.03.1993
2957	1.63	15.0	14.0	WATER BASED	26.02.1993
3111	1.63	19.0	19.5	WATER BASED	18.02.1993
3111	1.63	20.0	15.0	WATER BASED	18.02.1993
3111	1.63	19.0	17.0	WATER BASED	19.02.1993