General information

Wellbore name	7/12-11
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	7/12-11
Seismic location	BPN 91 - 228 SP 196.5
Production licence	164
Drilling operator	BP Norway Limited U.A.
Drill permit	696-L
Drilling facility	ROSS ISLE
Drilling days	68
Entered date	31.08.1991
Completed date	06.11.1991
Release date	06.11.1993
Publication date	08.03.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	22.0
Water depth [m]	68.0
Total depth (MD) [m RKB]	3868.0
Final vertical depth (TVD) [m RKB]	3864.0
Maximum inclination [°]	2.2
Bottom hole temperature [°C]	142
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50
NS degrees	57° 7' 10.71'' N
EW degrees	2° 58' 33.19'' E
NS UTM [m]	6330846.33
EW UTM [m]	498539.76
UTM zone	31
NPDID wellbore	1787

Wellbore history

General

Well 7/12-11 was designed to test 7/12-JU6 prospect, a Late Jurassic Ula Formation sand in a structural prospect some 7 km east of the Ula Field. Well 7/12-11 was located close to the edge of the perceived Late Jurassic Ula Trend fairway.

The prospect was defined as a structural trap with fault closure to the east and north, and dip closure to the southwest. Lateral seal to the east was thought to be provided by cross-fault seal of Late Jurassic reservoir against Triassic shales and siltstones. The key element of risk was trap effectiveness, as the prospect relied on a shattered sub-seismic fault zone in the northeastern corner. The results might have implications for further prospectivity in the licence.

The primary objective for the 7/12-11 well was to prove a volume of oil that was commercial as a tieback development to the Ula Platform. Secondary objectives were the uppermost part of the Triassic rocks and the Middle Jurassic Bryne Formation.

Operations and results

Wildcat well 7/12-11 was spudded with the semi-submersible installation Ross Isle on 31 August 1991 and drilled to TD at 3865 m in the Triassic Skagerrak Formation. A 9 7/8" pilot hole was drilled to 950 m, and some shallow gas was detected by ROV sonar and observation of some surface bubbles at 518 m. The 17 1/2" hole was drilled with the experimental mud system RCS/DF+. In the 12 1/4" hole this mud was gradually diluted and displaced to a KCl/IOBOND mud. Drilling proceeded without significant problems to TD.

The Ula sandstones came in at 3787.5 m, 39.5 m deeper than prognosed. It was only 12.5 m thick which was 78 m thinner than prognosed. The Bryne Formation was absent. Very weak hydrocarbon fluorescence was observed in sand stringers of the Lista Formation. Minor gas shows were observed in the Mandal Formation. Occasional oil stained grains with very weak cut fluorescence were seen in the cuttings of the Ula Formation. No shows were observed in the sidewall cores. One 10 m conventional core was cut in the Triassic Skagerrak Formation. A total of 21 sidewall cores were attempted, and 14 were recovered. Two RFT fluid samples were taken at 3797.5 m. No gas or oil was recovered in these samples, only water. The well was permanently abandoned on 6 November 1991 as a dry hole with weak hydrocarbon shows.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
950.00	3865.00

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	3802.7	3812.0	[m]

Total core sample length [m]	9.3
Cores available for sampling?	YES

Core photos

3802-3807m

3807-3812m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
3733.0	[m]	DC	PETROSTR
3739.0	[m]	DC	PETROS
3745.0	[m]	DC	PETROS
3751.0	[m]	DC	PETROS
3757.0	[m]	DC	PETROS
3763.0	[m]	DC	PETROS
3769.0	[m]	DC	PETROS
3775.0	[m]	DC	PETROS
3781.0	[m]	DC	PETROS
3787.0	[m]	DC	PETROS
3793.0	[m]	DC	PETROS
3799.0	[m]	DC	PETROS

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
90	NORDLAND GP

1837	HORDALAND GP
2708	ROGALAND GP
2708	BALDER FM
2741	SELE FM
2822	LISTA FM
2953	VIDAR FM
2962	LISTA FM
2973	SHETLAND GP
2973	EKOFISK FM
3124	TOR FM
3387	HOD FM
3486	CROMER KNOLL GP
3486	RØDBY FM
3569	SOLA FM
3586	TUXEN FM
3596	ÅSGARD FM
3728	TYNE GP
3728	MANDAL FM
3753	FARSUND FM
3788	VESTLAND GP
3788	ULA FM
3800	NO GROUP DEFINED
3800	SKAGERRAK FM

Composite logs

Document name	Document format	Document size [MB]
1787	pdf	0.47

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

Document name	Document format	Document size [MB]
1787_01_WDSS_General_Information	pdf	0.42
1787_02_WDSS_completion_log	pdf	0.21

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

Document name	Document format	Document size [MB]
1787_7_12_11_COMPLETION_REPORT_AND_LOG	pdf	61.28

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DLL LSS GR CAL SP	75	2746
DLL MSFL SDT GR SP CAL	2738	3872
LDL CNL NGT GR	2738	3871
MSCT GR	3764	3806
MWD	90	3865
RFT HP GR	3791	3833
SHDT GR	2738	3872
WST GR	500	3871

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	163.0	36	165.0	0.00	LOT
INTERM.	20	935.0	26	937.0	1.70	LOT
INTERM.	13 3/8	2735.0	17 1/2	2737.0	1.90	LOT
OPEN HOLE		3868.0	12 1/2	3868.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
206	1.03			WATER BASED	
946	1.20	23.0		WATER BASED	
950	1.05	39.0		WATER BASED	
962	1.20	17.0		WATER BASED	
1222	1.39	30.0		WATER BASED	
1405	1.60	54.0		WATER BASED	
1413	1.60	35.0		WATER BASED	
1595	1.60	60.0		WATER BASED	

1764	1.70	55.0		WATER BASED	
1907	1.60	48.0		WATER BASED	
2051	1.60	45.0		WATER BASED	
2205	1.60	36.0		WATER BASED	
2313	1.60	40.0		WATER BASED	
2380	1.60	31.0		WATER BASED	
2386	1.60	34.0		WATER BASED	
2522	1.60	44.0		WATER BASED	
2659	1.60	44.0		WATER BASED	
2667	1.60	34.0		WATER BASED	
2737	1.60	31.0		WATER BASED	
2743	1.60	28.0		WATER BASED	
2767	1.58	36.0		WATER BASED	
2873	1.55	32.0		WATER BASED	
2972	1.55	34.0		WATER BASED	
3015	1.55	30.0		WATER BASED	
3055	1.55	27.0		WATER BASED	
3087	1.55	31.0		WATER BASED	
3109	1.55	32.0		WATER BASED	
3168	1.55	32.0		WATER BASED	
3203	1.55	32.0		WATER BASED	
3326	1.55	38.0		WATER BASED	
3474	1.55	36.0		WATER BASED	
3557	1.55	35.0		WATER BASED	
3587	1.55	35.0		WATER BASED	
3596	1.55	34.0		WATER BASED	
3624	1.55	38.0		WATER BASED	
3640	1.55	36.0		WATER BASED	
3674	1.55	39.0		WATER BASED	
3723	1.55	28.0		WATER BASED	
3730	1.55	33.0		WATER BASED	
3802	1.55	32.0		WATER BASED	
3865	1.55	38.0		WATER BASED	

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]
1787_Formation_pressure_(Formasjonstrykk)	pdf	0.22