

**General information**

Wellbore name	30/3-7 B
Type	EXPLORATION
Purpose	WILDCAT
Status	RE-CLASS TO TEST
Factmaps in new window	link to map
Main area	NORTH SEA
Field	VESLEFRIKK
Discovery	30/3-7 B
Well name	30/3-7
Seismic location	LINE 229/CDP 753
Production licence	052
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	910-L
Drilling facility	VESLEFRIKK A
Drilling days	77
Entered date	20.05.1998
Completed date	04.08.1998
Release date	04.08.2000
Publication date	07.11.2005
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	BRENT GP
2nd level with HC, age	EARLY JURASSIC
2nd level with HC, formation	COOK FM
Kelly bushing elevation [m]	56.0
Water depth [m]	175.0
Total depth (MD) [m RKB]	5970.0
Final vertical depth (TVD) [m RKB]	4217.0
Maximum inclination [°]	67.2
Bottom hole temperature [°C]	153
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	COOK FM
Geodetic datum	ED50
NS degrees	60° 46' 57.98" N
EW degrees	2° 53' 51.95" E



NS UTM [m]	6738755.54
EW UTM [m]	494432.48
UTM zone	31
NPDID wellbore	3229

Wellbore history

**General**

Well 30/3-7 S was planned to drill the B-Prospect of the Veslefrikk field, but found hydrocarbons in various small fault segments on the edge of the Veslefrikk horst, and never reached the B-Prospect. Well 30/3-7 A, that was plugged back, was the first well to penetrate the Brent Group in the B-Prospect as a pilot hole for 30/3-7 B. Well 30/3-7 B was the first well to be drilled through the C-segment, and into the B-prospect west of the Main Veslefrikk Field.

The main objectives for well 30/3-7 B were to explore the sand potential and possible hydrocarbons in the C-segment, and in the B-prospect. The well would be utilized as a producer if sufficient amount of hydrocarbons were found. Because of total depth deeper than 4000 m TVD the well was classified as a HPHT well.

Operations and results

Wildcat well 30/3-7 B was drilled from the fixed surface installation Veslefrikk A as a sidetrack from well 30/3-7 S higher up than 30/3-7A (2066 m TVD/2780 m MD versus 2397 m TVD/ 3336 m MD). It was kicked off on 20 May 1998. The well was drilled to 5970 m MD/4217 m TVD RKB in the Dunlin Group. The mud used, from kick-off to TD, was Interdrill, a pseudo-oil based mud system.

The base Cretaceous/top Viking Group was penetrated at 4259 m MD/3100 m TVD, 10 m shallow. Hydrocarbon filled Brent Group slump blocks (approximately 40 m reservoir sandstone) was encountered just below base Cretaceous at 4271.5 m MD/3107.7 m TVD. The lower 20 m is recognized as the Oseberg informal Formation B2A/B.

Two cores were cut (7 and 4 m) just above the main slump plane. They consisted of brittle Drake Formation shales that caused frequent jamming and very short cores. The slump plane was penetrated only 5 m shallower than prognosed.

The C-segment contains hydrocarbon filled Intra Dunlin Sand (IDS), which came in 32 m shallow. The reservoir quality in this location is poor. Three major faults have been observed between the C-segment and the B-prospect. The throws are approximately 400, 150 and 400 meters.

The fault block VF west 1 (produced in well 30/3-7S) was encountered close to prognosis, but the stratigraphy came in deeper, with unexpected 24 m TVD of sandy Ness Fm. The main fault to the B-prospect came in 80 m further to the west than prognosed, giving a total width of the VF west 1 block of 200 m. Two cores were cut from 4346 m to 4358.5 m in the L-prospect, just above the main slump plane. One oriented core was cut from 5715 m to 5740 m in the Oseberg Informal Formation in the B-prospect. Two MDT runs were made in the interval 4290 m to 5917 m, for pressure points and fluid sampling. Fluid samples were taken at 4290.5 m (mud filtrate and gas), 4674.9 m, and 5902.8 m.

The well was completed on 4 August 1998 as an oil/gas discovery. In January 1999 it was perforated over the intervals 5139 -5145 and 5163 - 5179 m MD and reclassified to production test well 30/3-T-7 B.

Testing

No drill stem test was performed.

Cores at the Norwegian Offshore Directorate



Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	4346.0	4353.2	[m]
2	4354.0	4358.5	[m]
3	5715.0	5740.2	[m]

Total core sample length [m]	37.0
Cores available for sampling?	YES

Core photos



4346-4351m



4351-4356m



4356-4358m



5715-5720m



5720-5725m



5725-5730m



5730-5735m



5735-5740m



5740-5741m

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
231	NORDLAND GP
783	UTSIRA FM
963	HORDALAND GP
2670	ROGALAND GP
2670	BALDER FM
2804	SELE FM
2844	LISTA FM
3116	SHETLAND GP
3116	JORSALFARE FM
3437	KYRRE FM
3693	TRYGGVASON FM



4261	VIKING GP
4261	HEATHER FM
4272	BRENT GP
4272	NESS FM
4304	OSEBERG FM
4350	DUNLIN GP
4350	DRAKE FM
4378	COOK FM
4439	AMUNDSEN FM
4611	STATFJORD GP
4948	DUNLIN GP
4948	DRAKE FM
5124	BRENT GP
5124	NESS FM
5202	ETIVE FM
5229	RANNOCH FM
5259	OSEBERG FM
5326	NESS FM
5352	VIKING GP
5352	HEATHER FM
5514	BRENT GP
5514	TARBERT FM
5593	NESS FM
5674	ETIVE FM
5693	OSEBERG FM
5777	DUNLIN GP
5777	DRAKE FM
5897	COOK FM

Composite logs

Document name	Document format	Document size [MB]
3229	pdf	0.49

Geochemical information





Document name	Document format	Document size [MB]
3229_1	pdf	0.57

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

Document name	Document format	Document size [MB]
3229_30_3_7_B_COMPLETION_LOG	.pdf	2.14
3229_30_3_7_B_COMPLETION_REPORT	.pdf	22.98

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AMS CNT LDL BHC CMR GR	4208	5960
MDT CMR GR	5131	5355
MDT GR	4290	4396
MDTCMR GR	4301	5903
MWD - GR RES DIR	2784	5970
UIB AIT	0	0

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
INTERM.	9 5/8	4287.0	12 1/4	4290.0	1.65	LOT
LINER	5	5962.0	8 3/8	5962.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
2780	1.60	46.0		INTERDRILL NT	
4292	1.53	41.0		INTERDRILL NT	
4778	1.53	46.0		INTERDRILL NT	
5125	1.53	45.0		INTERDRILL NT	
5170	1.53	40.0		INTERDRILL NT	
5272	1.50	41.0		INTERDRILL NT	
5320	1.53	42.0		INTERDRILL NT	





5377	1.53	43.0		INTERDRILL NT	
5757	1.53	48.0		INTERDRILL NT	
5970	1.53	48.0		INTERDRILL NT	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
4346.40	[m]
4351.65	[m]

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]
3229 Formation pressure (Formasjonstrykk)	pdf	0.23

