General information

Wellbore name	6707/10-2 A
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Discovery	6707/10-2 A
Well name	6707/10-2
Seismic location	BPN9601STR07-inline 1823-x-line 2312
Production licence	218
Drilling operator	StatoilHydro ASA
Drill permit	1199-L
Drilling facility	TRANSOCEAN LEADER
Drilling days	49
Entered date	14.10.2008
Completed date	01.12.2008
Release date	01.12.2010
Publication date	01.12.2010
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	YES
1st level with HC, age	LATE CRETACEOUS
1st level with HC, formation	KVITNOS FM
Kelly bushing elevation [m]	24.0
Water depth [m]	1248.0
Total depth (MD) [m RKB]	4850.0
Final vertical depth (TVD) [m RKB]	4325.0
Maximum inclination [°]	53.5
Bottom hole temperature [°C]	109
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	KVITNOS FM
Geodetic datum	ED50
NS degrees	67° 2' 48.8'' N
EW degrees	7° 3' 38.3'' E
NS UTM [m]	7438113.36
EW UTM [m]	415608.90

UTM zone	32
NPDID wellbore	5931

Wellbore history

General

The 6707/10-2 A Haklang West flank well is a sidetrack from well 6707/10-2 S. The surface well location is ca 3.5 km south-east of the 6707/10-1 Luva Discovery on the Nyk High in the Northern Norwegian Sea. The objective of the Haklang West flank well was to prove hydrocarbon in the Nise 2 sandstone.

Operations and results

Wildcat well 6707/10-2 A was kicked off on 13 October 2008 from the original wellbore 6707/10-2 S at 3110 m MD, below the 9 5/8" liner shoe. It was drilled to TD at 4850.0 m (4325.0 m TVD) in the Late Cretaceous Kvitnos Formation. No significant technical problem was encountered in the operations. The well was drilled with Versatec DW oil-based mud from kick-off to TD.

The well penetrated the reservoir, the Kvitnos Formation, at 4426.0 m (4055.0 m TVD RKB). This reservoir was expected to be a part of the Nise Formation before drilling of the well (Nise 2 sandstone). Based on the biostratigraphy results, the stratigraphy was changed. Dry gas was proven, and the reservoir properties were moderately good (Net/Gross is 0.67 and a porosity of 0.17). The GWC was defined at 4487.0 m (4092.0 m TVD RKB) giving a gas column of 37.0 m. The 6707/10-2 A was drilled with oil-based mud, and the oil base had a weak fluorescence that made detection of natural petroleum fluorescence difficult.

Two cores were cut at 4434 to 4488 m in the Kvitnos Formation reservoir. Two separate MDT runs were performed. One intermediate run with MDT on wire line obtained samples from depths 3317.7 m (3303.8 m TVD RKB) and 3350.0 m (3333.7 m TVD RKB). Water was the moveable fluid obtained at both depths. The second MDT run was run on TLC. Two sampling depths and one scanning station were performed. At 4483.0 m MD/4089.6 m TVD gas was the movable fluid and at 4615.0 m MD/ 4169.0 m TVD water was the movable fluid. For the scanning station at 4489 m MD slugs of

water was observed and no samples were obtained at this depth.

The well permanently abandoned on 3 December 2008. It is a gas discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
3110.00	4850.00

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	4434.0	4461.0	[m]
2	4461.0	4487.8	[m]

Total core sample length [m]	53.8
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
1271	NORDLAND GP
1271	NAUST FM
2068	KAI FM
2096	HORDALAND GP
2096	BRYGGE FM
2189	ROGALAND GP
2189	TARE FM
2224	TANG FM
2294	SHETLAND GP
2294	SPRINGAR FM
3129	NISE FM
4426	KVITNOS FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AIT PEX DSI HNGS	4112	4826
MDT	3317	3350
MDT - MINI DST	3966	4807
MWD - ARCVRES6 TELESCOPE	3110	3288
MWD - ECOSCOPE TELESCOPE VSONIC6	3288	4850
VSI-4	2013	4530

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
OPEN HOLE		4850.0	8 1/2	4850.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1440	1.18	16.0		Glydril	
3112	1.17	14.0		Versatec	
3288	1.18	15.0		Versatec	
3983	1.20	15.0		Versatec	
4461	1.20	15.0		Versatec	
4486	1.23	16.0		Versatec	
4488	1.23	16.0		Versatec	
4850	1.29	21.0		Versatec	
4850	1.26	17.0		Versatec	

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]
5931_Formation_pressure_(Formasjonstrykk)	pdf	0.29