

**General information**

Wellbore name	6706/12-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	<a href="#">link to press release</a>
Factmaps in new window	<a href="#">link to map</a>
Main area	NORWEGIAN SEA
Field	<a href="#">AASTA HANSTEEN</a>
Discovery	<a href="#">6706/12-1</a>
Well name	6706/12-1
Seismic location	BPN9601STR07-inline:2392 & crossline 2341
Production licence	<a href="#">218</a>
Drilling operator	StatoilHydro ASA
Drill permit	1189-L
Drilling facility	<a href="#">TRANSOCEAN LEADER</a>
Drilling days	48
Entered date	12.07.2008
Completed date	28.08.2008
Release date	28.08.2010
Publication date	28.08.2010
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	YES
1st level with HC, age	LATE CRETACEOUS
1st level with HC, formation	NISE FM
Kelly bushing elevation [m]	23.5
Water depth [m]	1262.0
Total depth (MD) [m RKB]	3950.0
Final vertical depth (TVD) [m RKB]	3949.0
Bottom hole temperature [°C]	91
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	KVITNOS FM
Geodetic datum	ED50
NS degrees	67° 2' 43.3" N
EW degrees	6° 52' 37.6" E
NS UTM [m]	7438203.84



EW UTM [m]	407619.33
UTM zone	32
NPDID wellbore	5867

## Wellbore history

### General

Well 6706/12-1 was drilled in 1262 m water depth on the Nyk High in the Norwegian Sea. The primary objective was to prove presence of hydrocarbons in the Snefrid South prospect within the Nise 1 Formation and confirm reservoir quality and production properties as input to DG1 for the Luva field development. Sandstones within the Campanian Upper Nise 1 Formation were primary target and lower Nise 1 in addition to Nise 2 Formation was the secondary target.

### Operations and results

Wildcat well 6706/12-1 was spudded with the semi-submersible installation Transocean Leader on 12 July 2008 and drilled to TD at 3950 m in the Late Cretaceous Kvitnos Formation. A 12 1/4" pilot hole was drilled to 2034 m, primarily for data acquisition purposes, but also to check for shallow water flow. Operations proceeded without significant problems, although some tight spots were experienced at 2034 m and in 8 1/2" section interval from 3408 to 3186 m. No shallow gas or shallow water flow was observed by the ROV at the wellhead or on the MWD logs while drilling the well. The well was drilled with seawater/spud mud/Glydril down to 2034 m, and with Ultradril mud containing 18-20% monoethylene glycol (MEG) from 2034 m to TD.

The well penetrated rocks of Quaternary, Tertiary, and late Cretaceous age. The well penetrated the Nise reservoir sand section at 2625 m, which was 13 m shallower than prognosed. The secondary target, Kvitnos Formation (Biostratigraphic dates proved the pre-drill "Nise 2" to be the Kvitnos Formation) was penetrated at 3516.5 m, which was 30.5 m shallower than prognosed. Dry gas was proven in the Nise Formation with 70 m of good quality reservoir. The gas - water contact was found at 2695 m, with a net to gross ratio of 77%, total porosity of 29% and Hydrocarbon saturation of 80%. The Kvitnos Formation was dry and with limited reservoir quality. No oil shows were recorded in the well.

Five cores of 18 m each were cut in the Nise reservoir from 2628 to 2714.5 m, with good recovery. One core of 27 m length was successfully cut in the Kvitnos Formation. Wire line samples were taken at 2625.6 m (gas) and at 2701.4 m (water) in the Nise Formation. The gas samples were taken with a very low pressure draw-down, and were expected to be of good quality.

The well was permanently abandoned on 28 August 2008 as 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]
2040.00	3950.00



Cuttings available for sampling?	YES
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### Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2628.0	2645.0	[m ]
2	2646.0	2664.0	[m ]
3	2664.0	2682.2	[m ]
4	2682.2	2699.8	[m ]
5	2700.0	2713.3	[m ]
6	3534.0	3560.9	[m ]

Total core sample length [m]	111.0
Cores available for sampling?	YES

### Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
1286	<a href="#">NORDLAND GP</a>
1286	<a href="#">NAUST FM</a>
2119	<a href="#">KAI FM</a>
2213	<a href="#">HORDALAND GP</a>
2213	<a href="#">BRYGGE FM</a>
2368	<a href="#">ROGALAND GP</a>
2368	<a href="#">TARE FM</a>
2427	<a href="#">SHETLAND GP</a>
2427	<a href="#">SPRINGAR FM</a>
2590	<a href="#">NISE FM</a>
3517	<a href="#">KVITNOS FM</a>

### Composite logs

Document name	Document format	Document size [MB]
<a href="#">5867</a>	pdf	0.60





## Geochemical information

Document name	Document format	Document size [MB]
<a href="#">5867 01 6706 12 1 gch transfer 1</a>	txt	0.00
<a href="#">5867 02 6706 12 1 gch results 1</a>	txt	0.12

## Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR GR	2620	2710
FMI DSI GR	2542	3945
MDT GR	2625	3915
MWD - ARCVRES6 TELE	2570	3950
MWD - ARCVRES8 GVR8 PP	2037	2580
MWD - ARCVRES8 VADN8 VSON8 PP	1379	2034
MWD - ARCVRES9 PP	1379	2034
MWD - PP	1285	1379
PEX HRLA DSI	2024	2567
PEX HRLA ECS HNGS EDTC	2385	3945
VSP GR	2010	3900

## 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	1376.0	36	1379.0	0.00	LOT
SURF.COND.	20	2024.0	26	2034.0	1.39	LOT
PILOT HOLE		2034.0	12 1/4	2034.0	0.00	LOT
INTERM.	9 5/8	2572.0	12 1/4	2583.0	1.44	LOT
OPEN HOLE		3950.0	8 1/2	3950.0	0.00	LOT

## Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1379	1.03			spud mud	
2034	1.03			spud mud	
2583	1.18			Ultradril	





3950	1.23			Ultradril	
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**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]
<a href="#">5867 Formation pressure (Formasjonstrykk)</a>	pdf	0.28

