

**General information**

Wellbore name	6705/10-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Field	IRPA
Discovery	6705/10-1 Irpa
Well name	6705/10-1
Seismic location	GRE02STR05.inline3790 & crossline 5216
Production licence	327 B
Drilling operator	StatoilHydro Petroleum AS
Drill permit	1229-L
Drilling facility	TRANSOCEAN LEADER
Drilling days	43
Entered date	05.02.2009
Completed date	19.03.2009
Release date	19.03.2011
Publication date	19.03.2011
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	YES
1st level with HC, age	LATE CRETACEOUS
1st level with HC, formation	SPRINGAR FM
Kelly bushing elevation [m]	23.5
Water depth [m]	1335.0
Total depth (MD) [m RKB]	3775.0
Final vertical depth (TVD) [m RKB]	3774.0
Maximum inclination [°]	2.4
Bottom hole temperature [°C]	117
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	LANGE FM
Geodetic datum	ED50
NS degrees	67° 0' 58.4" N
EW degrees	5° 17' 47.8" E
NS UTM [m]	7435225.68



EW UTM [m]	600057.62
UTM zone	31
NPDID wellbore	6044

Wellbore history

General

The 6705/10-1 Asterix well is located in the Vøring Basin of the Norwegian Sea. It was drilled on a seismic flat spot on the Gjallar Ridge, anticipated to be a gas-water contact. The main objective was to prove hydrocarbons in reservoir of the Late Cretaceous age (Maastrichtian) Springar Formation. Expected hydrocarbon phase was dry gas similar to Luva (6707/10-1). The TD requirement for the well was to drill at least 50 m into Turonian aged rocks or minimum 3750 m TVDSS, whatever came first.

Operations and results

Wildcat well 6705/10-1 was spudded with the semi-submersible installation Transocean Leader on 5 February 2009 and drilled to TD at 3775 m in the Early Cretaceous Lange Formation. Due to obstruction in the well wire line logs were run only to 3712 m. Otherwise operations proceeded without significant problems. The well was drilled with seawater and hi-vis sweeps down to 2360 m and with Ultradril mud from 2360 m to TD.

Top Springar Formation was encountered at 3214 m with an 85 m column of dry gas. The gas/water contact was not possible to establish exactly, but is estimated to be in the interval 3302 to 3297 m. Weak oil shows were recorded in the interval 2865 to 2960 m.

Four cores were cut in the Springar Formation from 3226 to 3332.5 m. Core number four lost ca four meter (3309 to 3310 m) due to core erosion. MDT gas samples were taken at 3223.5 m and 3276 m. An MDT water sample was taken at 3301.5 m.

The well was permanently abandoned on 19 March 2009 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]
2370.00	3775.00

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	3226.0	3252.2	[m]



2	3252.2	3279.4	[m]
3	3279.5	3305.4	[m]
4	3305.5	3327.3	[m]

Total core sample length [m]	101.1
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
1358	NORDLAND GP
1358	NAUST FM
1525	KAI FM
2005	HORDALAND GP
2005	BRYGGE FM
2718	ROGALAND GP
2718	TARE FM
2922	TANG FM
3214	SHETLAND GP
3214	SPRINGAR FM
3403	NISE FM
3480	KVITNOS FM
3525	CROMER KNOLL GP
3525	LANGE FM

Composite logs

Document name	Document format	Document size [MB]
6044	pdf	0.39

Logs

Log type	Log top depth [m]	Log bottom depth [m]
GR VSI	2369	3700
MDT MS PO PO QS LFA	3301	3301
MDT MS PO SP PO QS LFA	3223	3324





MDT SP GR CMR	2315	3324
MWD - ARCVRES8 POWERPULSE	2905	3775
MWD - ARCVRES9 POWERPULSE	1448	2905
MWD - POWERPULSE	1358	1448
PEX HRLA IS PPC MSIP HNGS	2891	3712

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	1447.0	36	1450.0	0.00	LOT
SURF.COND.	20	2350.0	26	2363.0	1.27	LOT
INTERM.	13 3/8	2896.0	17 1/2	2908.0	1.39	LOT
OPEN HOLE		3775.0	12 1/4	3775.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1447	1.30	19.0		Ultradill	
1450	1.30	19.0		Ultradill	
1850	1.14	14.0		Ultradill	
2360	1.30	20.0		Ultradill	
2905	1.20	14.0		Ultradill	
2905	1.18	14.0		Ultradill	
3226	1.24	20.0		Ultradill	
3306	1.24	20.0		Ultradill	
3332	1.25	22.0		Ultradill	
3495	1.27	24.0		Ultradill	
3775	1.26	25.0		Ultradill	

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]
6044 Formation pressure (Formasjonstrykk)	pdf	0.29

