

**General information**

Wellbore name	6407/8-4 S
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	6407/8-4 S (Galtvort)
Well name	6407/8-4
Seismic location	BPN9501R05 &line 496 & trace 2708 & seismic 3D survey
Production licence	348
Drilling operator	StatoilHydro Petroleum AS
Drill permit	1182-L
Drilling facility	WEST ALPHA
Drilling days	32
Entered date	20.04.2008
Completed date	21.05.2008
Release date	21.05.2010
Publication date	21.05.2010
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	GARN FM
Kelly bushing elevation [m]	18.0
Water depth [m]	266.0
Total depth (MD) [m RKB]	2788.0
Final vertical depth (TVD) [m RKB]	2650.3
Maximum inclination [°]	39
Bottom hole temperature [°C]	104
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	ÅRE FM
Geodetic datum	ED50
NS degrees	64° 26' 47.8" N
EW degrees	7° 38' 54.2" E
NS UTM [m]	7147652.53



EW UTM [m]	434947.46
UTM zone	32
NPDID wellbore	5813

Wellbore history

General

The Galtvort well 6407/8-4 S is located on the eastern margin of the Gimsan Basin in the Norwegian Sea, ca 7 km northwest of the Draugen Field. The primary objective was to test the hydrocarbon potential of the Middle Jurassic Garn and Ile Formations of the Galtvort prospect. The secondary objective was to test the hydrocarbon potential of prospective formations in the Early Jurassic Båt Group.

Operations and results

Wildcat well 6407/8-4 S was spudded with the semi-submersible installation West Alpha on 20 April 2008 and drilled to TD at 2788 m (2650.3 m TVD) in the Early Jurassic Åre Formation. The well was drilled vertical down to 1240 m, and then deviated with up to 39 deg inclination at 1980 m, then falling off to 19.5 deg at TD. The well was drilled with water based spud mud down to 930 m, and with Glydril mud from 930 m to TD. No significant technical problems were encountered in the operations. No shallow gas was observed by the ROV at the wellhead or by the MWD while drilling the 26" hole.

The well penetrated rocks of Quaternary, Tertiary, Cretaceous, and Jurassic age. The Garn reservoir section was encountered at 2212 m (2118 m TVD), 77 m shallower than prognosed, and proved a GWC at 2280 m (2178 m TVD). The remaining reservoirs were found to be water bearing, but residual oil staining and high gas readings from cuttings during drilling, log responses and oil shows on core indicated residual hydrocarbons in the Ile Formation.

One 27.2 m core was cut from 2221.0 - 2248.2 m in the Garn Formation. The general lithology in this core was sandstone with traces of claystone. A second core was cut from 2379.0 - 2405.3 m (26.3 m long) in the Ile Formation. The general lithology in this core was sandstone with shale laminations. MDT wire line gas samples were taken at 2232 m and at 2186.5 m. Sampling was performed with only a few bar drawdown and the samples are believed to be representative of the formation fluids.

The well was permanently abandoned on 21 May 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]
940.00	2788.00

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	2221.0	2248.2	[m]
2	2379.0	2405.3	[m]

Total core sample length [m]	53.5
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
284	NORDLAND GP
284	NAUST FM
997	KAI FM
1025	HORDALAND GP
1025	BRYGGE FM
1665	ROGALAND GP
1665	TARE FM
1738	TANG FM
1937	SHETLAND GP
1937	NISE FM
2047	KVITNOS FM
2178	VIKING GP
2178	SPEKK FM
2184	ROGN FM
2187	SPEKK FM
2198	MELKE FM
2212	FANGST GP
2212	GARN FM
2307	NOT FM
2375	ILE FM
2422	BÅT GP
2422	ROR FM
2550	TILJE FM
2724	ÅRE FM

**Geochemical information**

Document name	Document format	Document size [MB]
5813 01 6407 8 4S gch transfer 1	txt	0.00
5813 02 6407 8 4S gch results 1	txt	0.07

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR HRLA PEX ECS HNGS	2177	2788
FMI GR	2180	2780
FMI PPC MSIP PPC GR	1500	2785
MDT GR	2186	2737
MDT GR	2186	2186
MSCT GR	2181	2426
MWD - DIR	284	347
MWD - GR RES DIR	347	930
MWD - GR RES DIR PWD	930	2015
MWD - GR RES DIR PWD DEN NEU TT	2015	2221
MWD - GR RES DIRPWD OT	2221	2788
VSP GR	743	2785

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	345.0	36	347.0	0.00	LOT
SURF.COND.	20	917.0	26	930.0	1.68	LOT
INTERM.	13 3/8	2004.0	17 1/2	2015.0	1.91	LOT
INTERM.	9 5/8	2175.0	12 1/4	2219.0	0.00	LOT
OPEN HOLE		2788.0	8 1/2	2788.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
920	1.39	18.0		Glydril	
1362	1.45	20.0		Glydril	





1808	1.30	20.0		Glydril	
2015	1.46	18.0		Glydril	
2024	1.41	19.0		Glydril	
2028	1.41	20.0		Glydril	
2219	1.41	20.0		Glydril	
2220	1.30	14.0		Glydril	
2249	1.30	14.0		Glydril	
2405	1.30	16.0		Glydril	
2788	1.30	17.0		Glydril	

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]
5813 Formation pressure (Formasjonstrykk)	pdf	0.30

