



General information

Wellbore name	6407/8-5 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
Field	HYME
Discovery	6407/8-5 A
Well name	6407/8-5
Seismic location	3D survey BPN9501R05 inline 575 & crossline 1780
Production licence	348
Drilling operator	StatoilHydro Petroleum AS
Drill permit	1259-L
Drilling facility	WEST ALPHA
Drilling days	15
Entered date	30.05.2009
Completed date	13.06.2009
Release date	13.06.2011
Publication date	13.06.2011
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	ILE FM
2nd level with HC, age	EARLY JURASSIC
2nd level with HC, formation	TILJE FM
Kelly bushing elevation [m]	18.0
Water depth [m]	252.0
Total depth (MD) [m RKB]	3231.0
Final vertical depth (TVD) [m RKB]	2011.4
Maximum inclination [°]	115.3
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	TILJE FM
Geodetic datum	ED50
NS degrees	64° 20' 56.6" N



EW degrees	7° 33' 44.3" E
NS UTM [m]	7136873.69
EW UTM [m]	430558.81
UTM zone	32
NPDID wellbore	6153

Wellbore history

General

Well 6407/8-5 A is a sidetrack to well 6407/8-5 S on the Gygrid prospect situated 7 km west of the Draugen Field in the Norwegian Sea. The main well 6407/8-5 S found oil without gas cap in the Tilje Formation. The target of the sidetrack was to explore the hydrocarbon bearing Tilje Formation up-flanks on the structure.

Operations and results

Appraisal sidetrack well 6407/8-5 A was drilled with the semi-submersible installation West Alpha. The side track started on 30 May 2009 with milling a window through the 9 5/8" liner from 2412 m to 2415.2 m. A whip stock was set at 2419.5 m MD and the new section started from 2420 m MD, and was drilled down to Early Jurassic Tilje Formation at the deepest and then back up to Early Cretaceous, Kvitnos Formation with final TD at 3231 m (2011 m TVD). The well bore was drilled with Versatec oil based mud from kick-off to TD.

The sidetrack proved a 38 m oil column with an OWC at ca 2040 m TVD in the Ile Formation and a 98 m oil column with an OWC at ca 2151 m TVD in the Tilje Formation. No gas cap was seen in the reservoirs. The combined pressure data from the main well and the sidetrack showed that the water gradient in Ile and Tilje have a pressure difference of approximately one bar. This indicates that the Ror Formation act as a pressure barrier. Both water gradients have slightly higher pressure than the initial pressure on Draugen. Draugen has been producing for 16 years, and pressure depletion would have been expected if Gygrid was in communication with Draugen. Thus no communication is expected and Gygrid is most likely at initial pressure. No shows above the OBM were seen in the well.

No cores were cut in the well bore. MDT oil samples were taken at 2999 m in the Tilje Formation and at 3169 m in the Ile Formation.

The well was permanently abandoned on 13 June 2009 as an oil appraisal well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
2420.00	2699.00

Cuttings available for sampling?	YES
----------------------------------	-----

**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
270	NORDLAND GP
270	NAUST FM
900	KAI FM
936	HORDALAND GP
936	BRYGGE FM
1516	ROGALAND GP
1516	TARE FM
1604	TANG FM
1730	SHETLAND GP
1730	SPRINGAR FM
1775	NISE FM
1910	KVITNOS FM
2100	VIKING GP
2100	SPEKK FM
2180	MELKE FM
2253	FANGST GP
2253	GARN FM
2317	NOT FM
2347	ILE FM
2458	BÅT GP
2458	ROR FM
2566	TILJE FM
3004	ROR FM
3014	FANGST GP
3014	ILE FM
3194	CROMER KNOLL GP
3194	LYR FM
3199	SHETLAND GP
3199	KVITNOS FM

Composite logs

Document name	Document format	Document size [MB]
6153	pdf	0.41





Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - DIR	2412	2420
LWD - DIR GR RES DEN NEU SON	2420	3231
MDT GR	2449	3191

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	2412.0	12 1/4	2469.0	1.40	LOT
OPEN HOLE		3231.0	8 1/2	3231.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
2941	1.18	19.0		Versatec	
3024	1.18	20.0		Versatec	
3080	1.18	18.0		Versatec	
3164	1.18	16.0		Versatec	
3231	1.18	22.0		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]
6153 Formation pressure (Formasjonstrykk)	PDF	0.31

