



General information





Wellbore name	6407/3-1 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
Well name	6407/3-1
Seismic location	3D Survey STO4M08-BIN . IL 2612 & XL 3852
Production licence	312
Drilling operator	Statoil Petroleum AS
Drill permit	1349-L
Drilling facility	TRANSOCEAN LEADER
Drilling days	25
Entered date	14.04.2011
Completed date	08.05.2011
Plugged and abandon date	08.05.2011
Release date	14.11.2012
Publication date	14.11.2012
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	23.0
Water depth [m]	234.0
Total depth (MD) [m RKB]	2928.0
Final vertical depth (TVD) [m RKB]	2918.0
Maximum inclination [°]	10.5
Bottom hole temperature [°C]	111
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	TILJE FM
Geodetic datum	ED50
NS degrees	64° 46' 32.49" N
EW degrees	7° 42' 14.23" E
NS UTM [m]	7184265.96
EW UTM [m]	438370.92
UTM zone	32
NPDID wellbore	6582



Wellbore history

General

Well 6407/3-1 S was drilled on the Nordtuva prospect on the Bremstein Fault Complex in the Norwegian Sea. The well is located 17 km to the south of the Midgard gas/condensate field and 6 km to the North of the Mikkel gas/condensate field. The primary objective was to prove and encounter an economic volume of hydrocarbons in the Ile Formation of Early Jurassic age. A secondary objective was to prove hydrocarbons in the Middle Jurassic Garn Formation and in the Early Jurassic Åre Formation.

Operations and results

Wildcat well 6407/3-1 S was spudded with the semi-submersible installation Transocean Leader on 14 April 2011 and drilled to TD at 2928 m in the Early Jurassic Tilje Formation. No significant problem was encountered in the operations. No shallow gas was encountered. The well was drilled with seawater and hi-vis pills down to 474 m, with KCl/GEM/Polymer water based mud from 474 m to 1308 m, and with XP-07oil based mud from 1308 m to TD.

Sandstones of good to moderate quality were encountered in the Garn, Ile, Ror and Tilje formations. All were water wet. No hydrocarbon shows were recorded in the well.

No cores were cut. The XPT tool was run on wire line and 10 good pressure points were recorded showing three slightly different water gradients in the Garn, Ile/Ror, and Tilje formations, respectively. No wire line fluid samples were taken.

The well was permanently abandoned on 8 May 2011 as a dry well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
480.00	2928.00

Cuttings available for sampling?	YES
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Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
2539.0	[m]	DC	PETROSTR



2545.0	[m]	DC	PETROS
2551.0	[m]	DC	PETROS
2557.0	[m]	DC	PETROS
2563.0	[m]	DC	PETROS
2569.0	[m]	DC	PETROS
2575.0	[m]	DC	PETROS
2581.0	[m]	DC	PETROS
2588.0	[m]	DC	PETROS
2593.0	[m]	DC	PETROS
2599.0	[m]	DC	PETROS
2605.0	[m]	DC	PETROS
2611.0	[m]	DC	PETROS
2617.0	[m]	DC	PETROS
2623.0	[m]	DC	PETROS
2629.0	[m]	DC	PETROS

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
257	NORDLAND GP
624	NAUST FM
1239	KAI FM
1288	HORDALAND GP
1288	BRYGGE FM
1966	ROGALAND GP
1966	TARE FM
2023	TANG FM
2117	SHETLAND GP
2117	SPRINGAR FM
2157	NISE FM
2285	KVITNOS FM
2515	CROMER KNOLL GP
2515	LANGE FM
2530	LYR FM
2538	VIKING GP
2538	SPEKK FM
2622	FANGST GP
2622	GARN FM
2667	NOT FM



2700	ILE FM
2755	ROR FM
2875	TILJE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL USIT	1372	2587
LWD - PP ARC8 TELE SADN	2588	2928
MWD - ARCRES9 TELE	317	1304
PEX DSI XPT	2520	2932

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	317.5	36	320.5	0.00	LOT
SURF.COND.	20	464.3	26	474.0	1.37	LOT
INTERM.	13 3/8	1294.0	17 1/2	1308.0	1.62	LOT
INTERM.	9 5/8	2587.0	12 1/4	2592.0	1.99	LOT
OPEN HOLE		2928.0	8 1/2	2928.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
450	1.22	16.0		OBM-Low ECD	
471	1.14	14.0		KCl/Polymer/Glycol	
852	1.18	16.0		KCl/Polymer/Glycol	
1235	1.23	19.0		KCl/Polymer/Glycol	
1304	1.25	20.0		KCl/Polymer/Glycol	
1353	1.54	22.0		OBM-Low ECD	
1907	1.22	16.0		OBM-Low ECD	
2407	1.22	16.0		OBM-Low ECD	
2588	1.22	17.0		OBM-Low ECD	
2588	1.54	23.0		OBM-Low ECD	
2913	1.21	16.0		OBM-Low ECD	
2928	1.21	15.0		OBM-Low ECD	

