

**General information**

Wellbore name	6507/3-8
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	ALVE
Discovery	6507/3-8 Andvare
Well name	6507/3-8
Seismic location	3D survey :ST03M03-inline 5177 & xline 2967
Production licence	159 B
Drilling operator	Statoil Petroleum AS
Drill permit	1286-L
Drilling facility	OCEAN VANGUARD
Drilling days	37
Entered date	09.11.2009
Completed date	15.12.2009
Release date	15.12.2011
Publication date	10.01.2012
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	FANGST GP
2nd level with HC, age	EARLY JURASSIC
2nd level with HC, formation	BÅT GP
Kelly bushing elevation [m]	22.0
Water depth [m]	379.0
Total depth (MD) [m RKB]	2990.0
Final vertical depth (TVD) [m RKB]	2990.0
Maximum inclination [°]	2.9
Bottom hole temperature [°C]	113
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	TILJE FM
Geodetic datum	ED50



NS degrees	65° 59' 28.3" N
EW degrees	7° 59' 27.6" E
NS UTM [m]	7319482.41
EW UTM [m]	454188.40
UTM zone	32
NPDID wellbore	6258

Wellbore history

General

Well 6507/3-8 was drilled on the Gjøk prospect between the Alve and Norne Fields on the western flank of the Nordland Ridge in the Norwegian Sea. The well objective was to prove economical HC volumes in the Fangst and Båt groups and to secure the necessary data for a future development and tie-back to the Norne field

Operations and results

Wildcat well 6507/3-8 was spudded with the semi-submersible installation Ocean Vanguard on 9 November 2009 and drilled to TD at 2990 in the Early Jurassic Tilje Formation. No significant technical problem was encountered in the operations. The well was drilled with seawater and sweeps down to 1303 m and with Performadril WBM from 1303 m to TD. No shallow gas was observed.

The well penetrated Tertiary, Cretaceous, and Jurassic formations. Top Jurassic, Spekk Formation was encountered at 2534 m. A 142 m thick gas column was proven in Not, Ile and Tofte Formations and a 9.5 m thick oil column in Tofte Formation. The Not Formation was penetrated at 2693 m which was 6 meters deeper than prognosed, but the three main reservoir levels were 32 m thicker than prognosed. The gas-oil contact was proven at 2835 m and the oil-water contact at 2844 m. No oil shows were recorded outside of the hydrocarbon bearing reservoir in the well.

Five cores were cut, one in the Not Formation, one in the Ile Formation, one across the Ile/Tofte formation boundary and two in the Tofte Formation. MDT pressure measurements were collected in Not, Ile, Tofte and Tilje formations. The sandstones had good reservoir properties, and pressure measurements of good quality were achieved. The reservoir fluids were gas, oil and water. The gas zone was divided into two different pressure regimes with a pressure difference of approximately 0.5 Bar between the Not and the Ile/Tilje formations. Gas samples were collected at 2694.5 m and 2796 m in the Not and Tofte formations. Oil samples were collected at 2842.5 m in the Tofte oil zone. A water sample was collected at 2872 m in the Tilje formation. The water sample was collected in the same pressure regime as the hydrocarbons above. All hydrocarbon samples were collected with low drawdown and had good quality. The water sample contained approximately 10% mud filtrate, but is regarded to have reasonable quality.

The well was permanently abandoned on 15 December 2009 as an oil and 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]
1310.00	2991.00

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	2695.0	2715.1	[m]
2	2743.0	2783.2	[m]
3	2784.0	2794.6	[m]
4	2795.0	2822.2	[m]
5	2822.0	2844.3	[m]

Total core sample length [m]	120.4
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1310.0	[m]	DC	BIOSTRAT
1330.0	[m]	DC	BIOSTR
1350.0	[m]	DC	BIOSTR
1370.0	[m]	DC	BIOSTR
1390.0	[m]	DC	BIOSTR
1410.0	[m]	DC	BIOSTR
1430.0	[m]	DC	BIOSTR
1450.0	[m]	DC	BIOSTR
1470.0	[m]	DC	BIOSTR
1490.0	[m]	DC	BIOSTR
1510.0	[m]	DC	BIOSTR
1530.0	[m]	DC	BIOSTR
1550.0	[m]	DC	BIOSTR
1570.0	[m]	DC	BIOSTR
1590.0	[m]	DC	BIOSTR
1610.0	[m]	DC	BIOSTR
1630.0	[m]	DC	BIOSTR
1650.0	[m]	DC	BIOSTR



1670.0	[m]	DC	BIOSTR
1690.0	[m]	DC	BIOSTR
1710.0	[m]	DC	BIOSTR
1730.0	[m]	DC	BIOSTR
1750.0	[m]	DC	BIOSTR
1770.0	[m]	DC	BIOSTR
1790.0	[m]	DC	BIOSTR
1810.0	[m]	DC	BIOSTR
1830.0	[m]	DC	BIOSTR
1850.0	[m]	DC	BIOSTR
1870.0	[m]	DC	BIOSTR
1890.0	[m]	DC	BIOSTR
1910.0	[m]	DC	BIOSTR
1930.0	[m]	DC	BIOSTR
1950.0	[m]	DC	BIOSTR
1970.0	[m]	DC	BIOSTR
1980.0	[m]	DC	BIOSTR
1990.0	[m]	DC	BIOSTR
2000.0	[m]	DC	BIOSTR
2010.0	[m]	DC	BIOSTR
2020.0	[m]	DC	BIOSTR
2030.0	[m]	DC	BIOSTR
2040.0	[m]	DC	BIOSTR
2050.0	[m]	DC	BIOSTR
2060.0	[m]	DC	BIOSTR
2070.0	[m]	DC	BIOSTR
2080.0	[m]	DC	BIOSTR
2090.0	[m]	DC	BIOSTR
2100.0	[m]	DC	BIOSTR
2110.0	[m]	DC	BIOSTR
2120.0	[m]	DC	BIOSTR
2130.0	[m]	DC	BIOSTR
2140.0	[m]	DC	BIOSTR
2150.0	[m]	DC	BIOSTR
2160.0	[m]	DC	BIOSTR
2170.0	[m]	DC	BIOSTR
2180.0	[m]	DC	BIOSTR
2190.0	[m]	DC	BIOSTR
2200.0	[m]	DC	BIOSTR
2210.0	[m]	DC	BIOSTR



2220.0	[m]	DC	BIOSTR
2230.0	[m]	DC	BIOSTR
2240.0	[m]	DC	BIOSTR
2250.0	[m]	DC	BIOSTR
2260.0	[m]	DC	BIOSTR
2270.0	[m]	DC	BIOSTR
2280.0	[m]	DC	BIOSTR
2290.0	[m]	DC	BIOSTR
2300.0	[m]	DC	BIOSTR
2310.0	[m]	DC	BIOSTR
2320.0	[m]	DC	BIOSTR
2330.0	[m]	DC	BIOSTR
2340.0	[m]	DC	BIOSTR
2350.0	[m]	DC	BIOSTR
2360.0	[m]	DC	BIOSTR
2370.0	[m]	DC	BIOSTR
2380.0	[m]	DC	BIOSTR
2390.0	[m]	DC	BIOSTR
2400.0	[m]	DC	BIOSTR
2410.0	[m]	DC	BIOSTR
2420.0	[m]	DC	BIOSTR
2430.0	[m]	DC	BIOSTR
2439.0	[m]	DC	BIOSTR
2448.0	[m]	DC	BIOSTR
2457.0	[m]	DC	BIOSTR
2466.0	[m]	DC	BIOSTR
2475.0	[m]	DC	BIOSTR
2484.0	[m]	DC	BIOSTR
2493.0	[m]	DC	BIOSTR
2502.0	[m]	DC	BIOSTR
2511.0	[m]	DC	BIOSTR
2520.0	[m]	DC	BIOSTR
2529.0	[m]	DC	BIOSTR
2538.0	[m]	DC	BIOSTR
2547.0	[m]	DC	BIOSTR
2556.0	[m]	DC	BIOSTR
2562.0	[m]	DC	BIOSTR
2568.0	[m]	DC	BIOSTR
2784.0	[m]	C	BIOSTR
2785.0	[m]	C	BIOSTR



2786.0	[m]	C	BIOSTR
2787.0	[m]	C	BIOSTR
2788.0	[m]	C	BIOSTR
2789.0	[m]	C	BIOSTR
2790.0	[m]	C	BIOSTR
2791.0	[m]	C	BIOSTR
2792.0	[m]	C	BIOSTR
2793.0	[m]	C	BIOSTR
2794.0	[m]	C	BIOSTR
2795.0	[m]	C	BIOSTR
2796.0	[m]	C	BIOSTR
2797.0	[m]	C	BIOSTR
2798.0	[m]	C	BIOSTR
2799.0	[m]	C	BIOSTR
2800.0	[m]	C	BIOSTR
2801.0	[m]	C	BIOSTR
2802.0	[m]	C	BIOSTR
2803.0	[m]	C	BIOSTR
2804.0	[m]	C	BIOSTR
2805.0	[m]	C	BIOSTR
2806.0	[m]	C	BIOSTR
2807.0	[m]	C	BIOSTR
2808.0	[m]	C	BIOSTR
2809.0	[m]	C	BIOSTR
2810.0	[m]	C	BIOSTR
2811.0	[m]	C	BIOSTR
2812.0	[m]	C	BIOSTR
2813.0	[m]	C	BIOSTR
2814.0	[m]	C	BIOSTR
2815.0	[m]	C	BIOSTR
2816.0	[m]	C	BIOSTR
2817.0	[m]	C	BIOSTR
2818.0	[m]	C	BIOSTR
2819.0	[m]	C	BIOSTR
2820.0	[m]	C	BIOSTR
2821.0	[m]	C	BIOSTR
2822.0	[m]	C	BIOSTR
2823.0	[m]	C	BIOSTR
2824.0	[m]	C	BIOSTR
2825.0	[m]	C	BIOSTR



2826.0	[m]	C	BIOSTR
2827.0	[m]	C	BIOSTR
2828.0	[m]	C	BIOSTR
2829.0	[m]	C	BIOSTR
2830.0	[m]	C	BIOSTR
2831.0	[m]	C	BIOSTR
2832.0	[m]	C	BIOSTR
2833.0	[m]	C	BIOSTR
2834.0	[m]	C	BIOSTR
2835.0	[m]	C	BIOSTR
2836.0	[m]	C	BIOSTR
2837.0	[m]	C	BIOSTR
2838.0	[m]	C	BIOSTR
2839.0	[m]	C	BIOSTR
2840.0	[m]	C	BIOSTR
2841.0	[m]	C	BIOSTR
2842.0	[m]	C	BIOSTR
2843.0	[m]	C	BIOSTR
2843.5	[m]	C	BIOSTR
2844.3	[m]	C	BIOSTR

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
400	NORDLAND GP
1297	NAUST FM
1319	KAI FM
1614	HORDALAND GP
1614	BRYGGE FM
1852	ROGALAND GP
1852	TARE FM
1899	TANG FM
1944	SHETLAND GP
1944	SPRINGAR FM
2205	NISE FM
2356	KVITNOS FM
2525	CROMER KNOLL GP
2525	LYR FM
2534	VIKING GP



2534	SPEKK FM
2585	MELKE FM
2693	FANGST GP
2693	NOT FM
2740	ILE FM
2789	BÅT GP
2789	TOFTE FM
2844	TILJE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR ECS	2662	2990
HRLA PEX	2662	2990
MDT	2694	2967
MDT	2796	2796
MSIP	1800	2990
MWD LWD - ARCVRES8 TELE	1300	2663
MWD LWD - ARCVRES9 PP	465	1300
MWD LWD - DIR	400	462
MWD LWD - GVR6 ARCVRES6 TELE	2663	2990
VSP	480	2975

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	462.0	36	465.0	0.00	LOT
SURF.COND.	13 3/8	1295.0	17 1/2	1300.0	0.00	LOT
INTERM.	9 5/8	2662.0	12 1/2	2663.0	0.00	LOT
OPEN HOLE		2990.0	8 1/2	2990.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1300	1.50	22.0		Performadril	
1390	1.50	20.0		Performadril	



1793	1.50	28.0		Performadril	
2021	1.50	26.0		Performadril	
2205	1.50	37.0		Performadril	
2311	1.50	32.0		Performadril	
2480	1.51	37.0		Performadril	
2662	1.52	23.0		Performadril	
2663	1.51	21.0		Performadril	
2695	1.25	16.0		Performadril	
2716	1.25	16.0		Performadril	
2822	1.25	15.0		Performadril	
2990	1.25	15.0		Performadril	

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]
6258 Formation pressure (Formasjonstrykk)	pdf	0.27

