

**General information**

Wellbore name	7222/6-1 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	BARENTS SEA
Discovery	7222/6-1 S (Obesum)
Well name	7222/6-1
Seismic location	3D Survey : SG9804.inline 7625 & x-line 4363
Production licence	228
Drilling operator	StatoilHydro Petroleum AS
Drill permit	1165-L
Drilling facility	POLAR PIONEER
Drilling days	64
Entered date	07.01.2008
Completed date	10.03.2008
Release date	10.03.2010
Publication date	10.03.2010
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE TRIASSIC
1st level with HC, formation	SNADD FM
2nd level with HC, age	EARLY TRIASSIC
2nd level with HC, formation	KOBBE FM
Kelly bushing elevation [m]	23.0
Water depth [m]	364.0
Total depth (MD) [m RKB]	2895.0
Final vertical depth (TVD) [m RKB]	2848.0
Maximum inclination [°]	24
Bottom hole temperature [°C]	89
Oldest penetrated age	EARLY TRIASSIC
Oldest penetrated formation	HAVERT FM
Geodetic datum	ED50
NS degrees	72° 37' 25.01" N



EW degrees	22° 55' 51.4" E
NS UTM [m]	8063310.53
EW UTM [m]	364449.65
UTM zone	35
NPDID wellbore	5755

Wellbore history

**General**

The 7222/6-1 S Obesum well was drilled on the Bjarmeland Platform, south of the Swaen Graben, east of the Loppa High in the Barents Sea. The objective was to prove hydrocarbons in the Snadd Formation of Carnian age (B1 and B2 prospects) and in the Kobbe Formation of Anisian age (B3 and C4 prospects).

Operations and results

A pilot hole, 7222/6-U-1, was drilled 15 m east of the main well location. No shallow gas was found in the pilot hole. Wildcat well 7222/6-1 S was then spudded with the semi-submersible installation Polar Pioneer on 7 January 2008 and drilled to TD at 2895 m (2848 m TVD RKB) in the Early Triassic Havert Formation. The well was designed as an S-shaped well due to shallow gas warning, with a simplified casing design including a 30" casing at 452 m, a 20" casing set at 599 m and a 9 5/8" casing at 1050m. The 9 5/8" casing was set above the reservoir intervals that could have a pressure increase. At 1321 m the drill line snapped out of drum and DDM bails and elevator slid down maximum 1m and stopped on rig floor. Totally 6.2 days were lost to repairing of the damage done in this incident. The well was drilled with Seawater down to 604 m and with FormPro mud from 604 m to TD.

The Obesum well penetrated a short Quaternary section and then rocks of Triassic age. The observed stratigraphy was close to the prognosis, except for the reservoir levels in Snadd formation, which came in at 484 m (ditto TVD RKB), much shallower than expected. The Kobbe Formation came in at 1890 m (1843.2 m TVD RKB). Hydrocarbons were proven in channelized sandstones of Ladinian age (Snadd Formation) and in thin sandstone stringers in the Kobbe Formation. Moveable hydrocarbons were proven in this interval by MDT sampling. True migrated oil shows were recorded in these sections only; continuously from 1617 to 1648 m in the Snadd Formation, and more patchy from 1920 to 2067 m in the numerous thin sandstones the Kobbe Formation. Some fluorescence in the deeper Klappmyss Formation is interpreted as short migrated hydrocarbons from local carbonaceous claystones or due to mud additives. Geochemical analysis proved several source rock intervals in the Triassic: a gas prone source rock in the Klappmyss Formation from 2579 - 2675 m, and a richer oil prone source rock in the Kobbe Formation from 2447 to 2465 m. Finally, a very thin (3 meter thick) but also very rich source rock interval was proven on top of the Kobbe Formation at 1887 m. Rock-eval and vitrinite reflectance data indicate a maturity in the early oil window for the two deepest source rocks, while the thin uppermost source rock is probably in the beginning of or just below the oil window.

Four cores were cut in this well. Two were cut in the Snadd Formation from 1147 to 1156 m and 1637 to 1651 m, and two were cut in the Kobbe Formation from 1941 to 1945 m and 1951 to 1960 m. MDT fluid samples were taken at 1532.9 m (Formation water), 1625 m (gas), 1631 m (oil; high drawdown), 1633.3 m (oil, mud filtrate and water; high drawdown, poor sample), 1633.8 m (oil), and at 1642.1 m (water).

The well was permanently abandoned on 7 January 2008 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]
610.00	2895.00



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	1147.0	1155.2	[m]
2	1637.0	1651.0	[m]
3	1941.0	1943.8	[m]
4	1951.0	1959.1	[m]

Total core sample length [m]	33.1
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
610.0	[m]	DC	FUGRO
660.0	[m]	DC	FUGRO
680.0	[m]	DC	FUGRO
700.0	[m]	DC	FUGRO
720.0	[m]	DC	FUGRO
740.0	[m]	DC	FUGRO
760.0	[m]	DC	FUGRO
780.0	[m]	DC	FUGRO
800.0	[m]	DC	FUGRO
840.0	[m]	DC	FUGRO
860.0	[m]	DC	FUGRO
880.0	[m]	DC	FUGRO
1010.0	[m]	DC	FUGRO
1050.0	[m]	DC	FUGRO
1101.0	[m]	DC	FUGRO
1107.0	[m]	DC	FUGRO
1125.0	[m]	DC	FUGRO
1137.0	[m]	DC	FUGRO
1143.0	[m]	DC	FUGRO
1147.8	[m]	C	FUGRO
1149.9	[m]	C	FUGRO
1150.3	[m]	C	FUGRO
1154.4	[m]	C	FUGRO



1173.0 [m]	DC	FUGRO
1179.0 [m]	DC	FUGRO
1197.0 [m]	DC	FUGRO
1203.0 [m]	DC	FUGRO
1206.0 [m]	DC	FUGRO
1215.0 [m]	DC	FUGRO
1221.0 [m]	DC	FUGRO
1230.0 [m]	DC	FUGRO
1236.0 [m]	DC	FUGRO
1242.0 [m]	DC	FUGRO
1251.0 [m]	DC	FUGRO
1257.0 [m]	DC	FUGRO
1269.0 [m]	DC	FUGRO
1275.0 [m]	DC	FUGRO
1281.0 [m]	DC	FUGRO
1291.0 [m]	DC	FUGRO
1305.0 [m]	DC	FUGRO
1311.0 [m]	DC	FUGRO
1329.0 [m]	DC	FUGRO
1335.0 [m]	DC	FUGRO
1341.0 [m]	DC	FUGRO
1347.0 [m]	DC	FUGRO
1353.0 [m]	DC	FUGRO
1359.0 [m]	DC	FUGRO
1368.0 [m]	DC	FUGRO
1380.0 [m]	DC	FUGRO
1389.0 [m]	DC	FUGRO
1395.0 [m]	DC	FUGRO
1401.0 [m]	DC	FUGRO
1416.0 [m]	DC	FUGRO
1428.0 [m]	DC	FUGRO
1434.0 [m]	DC	FUGRO
1443.0 [m]	DC	FUGRO
1449.0 [m]	DC	FUGRO
1455.0 [m]	DC	FUGRO
1461.0 [m]	DC	FUGRO
1473.0 [m]	DC	FUGRO
1488.0 [m]	DC	FUGRO
1494.0 [m]	DC	FUGRO
1506.0 [m]	DC	FUGRO



1512.0 [m]	DC	FUGRO
1518.0 [m]	DC	FUGRO
1524.0 [m]	DC	FUGRO
1536.0 [m]	DC	FUGRO
1542.0 [m]	DC	FUGRO
1548.0 [m]	DC	FUGRO
1554.0 [m]	DC	FUGRO
1556.0 [m]	DC	FUGRO
1572.0 [m]	DC	FUGRO
1580.0 [m]	DC	FUGRO
1581.0 [m]	DC	FUGRO
1587.0 [m]	DC	FUGRO
1596.0 [m]	DC	FUGRO
1610.0 [m]	DC	FUGRO
1626.0 [m]	DC	FUGRO
1636.0 [m]	DC	FUGRO
1637.6 [m]	C	FUGRO
1639.3 [m]	C	FUGRO
1642.8 [m]	C	FUGRO
1645.4 [m]	C	FUGRO
1647.4 [m]	C	FUGRO
1649.3 [m]	C	FUGRO
1652.0 [m]	SWC	FUGRO
1665.0 [m]	DC	FUGRO
1671.0 [m]	DC	FUGRO
1681.0 [m]	SWC	FUGRO
1695.0 [m]	DC	FUGRO
1701.0 [m]	DC	FUGRO
1710.0 [m]	DC	FUGRO
1716.0 [m]	DC	FUGRO
1725.0 [m]	DC	FUGRO
1737.0 [m]	DC	FUGRO
1743.0 [m]	DC	FUGRO
1752.0 [m]	DC	FUGRO
1761.0 [m]	DC	FUGRO
1767.0 [m]	DC	FUGRO
1776.0 [m]	DC	FUGRO
1788.0 [m]	DC	FUGRO
1794.0 [m]	DC	FUGRO
1800.0 [m]	DC	FUGRO



1806.0 [m]	DC	FUGRO
1821.0 [m]	DC	FUGRO
1830.0 [m]	DC	FUGRO
1836.0 [m]	DC	FUGRO
1842.0 [m]	DC	FUGRO
1851.0 [m]	DC	FUGRO
1857.0 [m]	DC	FUGRO
1863.0 [m]	DC	FUGRO
1872.0 [m]	DC	FUGRO
1878.0 [m]	DC	FUGRO
1886.5 [m]	SWC	FUGRO
1893.0 [m]	DC	FUGRO
1905.0 [m]	DC	FUGRO
1911.0 [m]	DC	FUGRO
1932.0 [m]	DC	FUGRO
1942.4 [m]	CC	FUGRO
1952.6 [m]	CC	FUGRO
1955.3 [m]	CC	FUGRO
1958.2 [m]	CC	FUGRO
1965.0 [m]	DC	FUGRO
1971.0 [m]	DC	FUGRO
1980.0 [m]	DC	FUGRO
1986.0 [m]	DC	FUGRO
1992.0 [m]	DC	FUGRO
2004.0 [m]	DC	FUGRO
2016.0 [m]	DC	FUGRO
2022.0 [m]	DC	FUGRO
2031.0 [m]	DC	FUGRO
2043.0 [m]	DC	FUGRO
2049.0 [m]	DC	FUGRO
2064.0 [m]	DC	FUGRO
2076.0 [m]	DC	FUGRO
2082.0 [m]	DC	FUGRO
2097.0 [m]	DC	FUGRO
2103.0 [m]	DC	FUGRO
2115.0 [m]	DC	FUGRO
2127.0 [m]	DC	FUGRO
2139.0 [m]	DC	FUGRO
2145.0 [m]	DC	FUGRO
2154.0 [m]	DC	FUGRO



2160.0	[m]	DC	FUGRO
2175.0	[m]	DC	FUGRO
2184.0	[m]	DC	FUGRO
2190.0	[m]	DC	FUGRO
2202.0	[m]	DC	FUGRO
2208.0	[m]	DC	FUGRO
2220.0	[m]	DC	FUGRO
2232.0	[m]	DC	FUGRO
2238.0	[m]	DC	FUGRO
2247.0	[m]	DC	FUGRO
2253.0	[m]	DC	FUGRO
2265.0	[m]	DC	FUGRO
2271.0	[m]	SWC	FUGRO
2280.0	[m]	DC	FUGRO
2295.0	[m]	DC	FUGRO
2304.0	[m]	DC	FUGRO
2316.0	[m]	DC	FUGRO
2322.0	[m]	DC	FUGRO
2328.0	[m]	DC	FUGRO
2337.0	[m]	DC	FUGRO
2352.0	[m]	DC	FUGRO
2358.0	[m]	DC	FUGRO
2367.0	[m]	DC	FUGRO
2373.0	[m]	DC	FUGRO
2379.0	[m]	DC	FUGRO
2388.0	[m]	DC	FUGRO
2403.0	[m]	DC	FUGRO
2412.0	[m]	DC	FUGRO
2424.0	[m]	DC	FUGRO
2430.0	[m]	DC	FUGRO
2439.0	[m]	DC	FUGRO
2445.0	[m]	DC	FUGRO
2451.0	[m]	DC	FUGRO
2457.0	[m]	DC	FUGRO
2463.0	[m]	DC	FUGRO
2472.0	[m]	DC	FUGRO
2481.0	[m]	DC	FUGRO
2490.0	[m]	DC	FUGRO
2502.0	[m]	DC	FUGRO
2514.0	[m]	DC	FUGRO



2520.0	[m]	DC	FUGRO
2535.0	[m]	DC	FUGRO
2547.0	[m]	DC	FUGRO
2559.0	[m]	DC	FUGRO
2571.0	[m]	DC	FUGRO
2580.0	[m]	DC	FUGRO
2586.0	[m]	DC	FUGRO
2590.0	[m]	DC	FUGRO
2597.0	[m]	DC	FUGRO
2610.3	[m]	SWC	FUGRO
2619.0	[m]	DC	FUGRO
2623.0	[m]	SWC	FUGRO
2628.0	[m]	DC	FUGRO
2635.1	[m]	SWC	FUGRO
2649.1	[m]	SWC	FUGRO
2655.0	[m]	DC	FUGRO
2665.0	[m]	SWC	FUGRO
2670.0	[m]	DC	FUGRO
2676.0	[m]	DC	FUGRO
2730.0	[m]	DC	FUGRO
2742.0	[m]	DC	FUGRO
2748.0	[m]	DC	FUGRO
2754.0	[m]	DC	FUGRO
2778.0	[m]	DC	FUGRO
2784.0	[m]	DC	FUGRO
2799.0	[m]	DC	FUGRO
2805.0	[m]	DC	FUGRO
2817.0	[m]	DC	FUGRO
2823.0	[m]	DC	FUGRO
2829.0	[m]	DC	FUGRO
2835.0	[m]	DC	FUGRO
2847.0	[m]	DC	FUGRO
2859.0	[m]	DC	FUGRO
2871.0	[m]	DC	FUGRO
2886.0	[m]	DC	FUGRO

Oil samples at the Norwegian Offshore Directorate



Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
DST	1,01	1633.80	0.00	OIL	22.02.2008 - 14:05	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
387	NORDLAND GP
484	KAPP TOSCANA GP
484	SNADD FM
1890	SASSENDALEN GP
1890	KOBBE FM
2464	KLAPPMYSS FM
2674	HAVERT FM

Composite logs

Document name	Document format	Document size [MB]
5755	pdf	0.42

Geochemical information

Document name	Document format	Document size [MB]
5755_1	pdf	0.27
5755_2	pdf	6.14

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR PEX HRLA NHGS ECS ACTS ESRD	1050	2636
FMI MSIP PPC ACTS ECRD	1050	2636
MDT	1075	1979
MDT DP MINIDST	1622	1959





MDT DP MINIDST	1633	1633
MSCT GR	1526	2672
MWD - POWERDRIVE ARC	604	1057
MWD - POWERDRIVE ARCVRES6	1057	2895
MWD - POWERPULSE ARCVRES	387	604
VSP	514	2672

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	452.0	36	456.0	0.00	LOT
SURF.COND.	20	599.0	26	604.0	0.00	LOT
PILOT HOLE		600.0		600.0	0.00	LOT
INTERM.	9 5/8	1050.0	12 1/4	1057.0	1.76	LOT
OPEN HOLE		2848.0	8 1/2	2848.0	1.82	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
712	1.25	16.0		FORMPRO	
1057	1.26	17.0		FORMPRO	
1101	1.30	15.0		FORMPRO	
1322	1.31	15.0		FORM PRO	
1495	1.30	15.0		FORM PRO	
1637	1.31	16.0		FORM PRO	
1651	1.30	15.0		FORM PRO	
1941	1.30	17.0		FORM PRO	
1954	1.30	16.0		FORM PRO	
2636	1.32	18.0		FloPro	
2699	1.32	16.0		FormPro	
2753	1.32	17.0		FormPro	
2846	1.31	19.0		FormPro	
2895	1.30	15.0		Form Pro	

Thin sections at the Norwegian Offshore Directorate



Depth	Unit
1154.54	[m]
1639.50	[m]
1642.00	[m]
1942.20	[m]
1644.57	[m]
1958.80	[m]

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]
5755 Formation pressure (Formasjonstrykk)	pdf	0.21

