

**General information**

Wellbore name	6407/10-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6407/10-3
Seismic location	NH 8411-404 & SP. 460
Production licence	132
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	721-L
Drilling facility	TRANSOCEAN 8
Drilling days	30
Entered date	29.05.1992
Completed date	27.06.1992
Release date	27.06.1994
Publication date	02.03.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	23.5
Water depth [m]	323.5
Total depth (MD) [m RKB]	2973.0
Final vertical depth (TVD) [m RKB]	2972.0
Maximum inclination [°]	2.5
Bottom hole temperature [°C]	94
Oldest penetrated age	PRE-DEVONIAN
Oldest penetrated formation	BASEMENT
Geodetic datum	ED50
NS degrees	64° 6' 11.66" N
EW degrees	7° 18' 11.43" E
NS UTM [m]	7109795.67
EW UTM [m]	417314.23
UTM zone	32
NPDID wellbore	1927



Wellbore history

General

Well 6407/10-3 is located ca 15 km south of the Njord Field. The primary target of the well was to test Upper Jurassic transgressive sandstone (Draugen analogue). Lower Jurassic to Upper Triassic sandstone was a possible secondary target. In summary, the main objectives for drilling the well 6407/10-3 were: to test the oil potential of Upper Jurassic transgressive sand; to test reservoir quality and hydrocarbon potential of the dipping pre-Jurassic reflectors; to penetrate the deep basement reflectors and test reservoir quality in order to prepare area for relinquishment.

Operations and results

Well 6407/10-3 was spudded with the semi-submersible installation Transocean 8 on 29 May 1992 and drilled to TD at 2973 m in the Triassic Red Beds. The well was drilled with seawater and hi-vis pills down to 907 m and with KCl/PHPA mud from 907 m to TD.

The Upper Jurassic Viking Group was encountered at 1806 m and consisted of claystone characteristic of the Spekk Formation down to the Triassic section at 1827 m. From 1827 m to 1850 m Triassic Grey Beds were penetrated. From 1850 m to 2155 m undifferentiated Late to Middle Triassic Red Beds are present, followed by Carnian to Ladian Red Beds from 2155 m to 2555 m. Undifferentiated "red beds" continued to 2958.5 m, where the bore passed into fractured granitic basement. Weak shows were observed on cuttings from the Shetland and Cromer Knoll Groups (1518 m to 1785 m). Fair shows were observed on a core and a sidewall core from 1827 m to 1836 m in the Triassic Grey Beds. Two cores were cut, the first from 1830 m to 1837 m in the Grey Beds, the second was a one-metre core at 2972 m at TD. No fluid samples were taken. The well was permanently abandoned on 27 June 1992 as a dry hole.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
820.00	2972.00

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	1830.0	1836.3	[m]
2	2972.0	2972.6	[m]

Total core sample length [m]	6.9
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Cores available for sampling?	YES
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Core photos



1830-1835m



1835-2972m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
820.0	[m]	DC	HYDRO
840.0	[m]	DC	HYDRO
860.0	[m]	DC	HYDRO
880.0	[m]	DC	HYDRO
900.0	[m]	DC	HYDRO
920.0	[m]	DC	HYDRO
940.0	[m]	DC	HYDRO
950.0	[m]	DC	HYDRO
970.0	[m]	DC	HYDRO
1000.0	[m]	DC	HYDRO
1020.0	[m]	DC	HYDRO
1030.0	[m]	DC	HYDRO
1060.0	[m]	DC	HYDRO
1310.0	[m]	DC	HYDRO
1320.0	[m]	DC	HYDRO
1330.0	[m]	DC	HYDRO
1350.0	[m]	DC	HYDRO
1360.0	[m]	DC	HYDRO
1370.0	[m]	DC	HYDRO
1380.0	[m]	DC	HYDRO
1390.0	[m]	DC	HYDRO
1400.0	[m]	DC	HYDRO
1410.0	[m]	DC	HYDRO
1420.0	[m]	DC	HYDRO



1430.0 [m]	DC	HYDRO
1440.0 [m]	DC	HYDRO
1450.0 [m]	DC	HYDRO
1460.0 [m]	DC	HYDRO
1470.0 [m]	DC	HYDRO
1480.0 [m]	DC	HYDRO
1490.0 [m]	DC	HYDRO
1500.0 [m]	DC	HYDRO
1560.0 [m]	DC	HYDRO
1570.0 [m]	DC	HYDRO
1580.0 [m]	DC	HYDRO
1590.0 [m]	DC	HYDRO
1610.0 [m]	DC	HYDRO
1630.0 [m]	DC	HYDRO
1645.0 [m]	DC	HYDRO
1655.0 [m]	DC	HYDRO
1665.0 [m]	DC	HYDRO
1675.0 [m]	DC	HYDRO
1685.0 [m]	DC	HYDRO
1695.0 [m]	DC	HYDRO
1705.0 [m]	DC	HYDRO
1785.0 [m]	DC	HYDRO
1795.0 [m]	DC	HYDRO
1803.0 [m]	SWC	HYDRO
1805.0 [m]	SWC	HYDRO
1805.0 [m]	DC	HYDRO
1807.0 [m]	DC	HYDRO
1807.0 [m]	SWC	HYDRO
1810.0 [m]	DC	HYDRO
1811.0 [m]	SWC	HYDRO
1815.0 [m]	SWC	HYDRO
1815.0 [m]	DC	HYDRO
1820.0 [m]	DC	HYDRO
1821.0 [m]	SWC	HYDRO
1825.0 [m]	DC	HYDRO
1827.0 [m]	DC	HYDRO
1827.0 [m]	SWC	HYDRO
1829.0 [m]	SWC	HYDRO
1831.0 [m]	SWC	HYDRO
1832.0 [m]	DC	HYDRO



1875.0	[m]	DC	HYDRO
1910.0	[m]	DC	HYDRO
1927.0	[m]	DC	HYDRO
1950.0	[m]	DC	HYDRO
1970.0	[m]	DC	HYDRO
1990.0	[m]	DC	HYDRO
2010.0	[m]	DC	HYDRO
2032.0	[m]	DC	HYDRO
2045.0	[m]	DC	HYDRO
2055.0	[m]	DC	HYDRO
2160.0	[m]	DC	HYDRO
2190.0	[m]	DC	HYDRO
2210.0	[m]	DC	HYDRO
2260.0	[m]	DC	HYDRO
2280.0	[m]	DC	HYDRO
2305.0	[m]	DC	HYDRO
2325.0	[m]	DC	HYDRO
2350.0	[m]	DC	HYDRO
2390.0	[m]	DC	HYDRO
2410.0	[m]	DC	HYDRO
2500.0	[m]	DC	HYDRO
2520.0	[m]	DC	RRI
2540.0	[m]	DC	RRI
2580.0	[m]	DC	RRI
2600.0	[m]	DC	RRI
2620.0	[m]	DC	RRI
2640.0	[m]	DC	RRI
2660.0	[m]	DC	RRI
2700.0	[m]	DC	RRI
2740.0	[m]	DC	RRI
2760.0	[m]	DC	RRI
2780.0	[m]	DC	RRI
2815.0	[m]	DC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
347	NORDLAND GP
347	NAUST FM



743	KAI FM
818	HORDALAND GP
818	BRYGGE FM
1310	ROGALAND GP
1310	TARE FM
1382	TANG FM
1523	SHETLAND GP
1523	SPRINGAR FM
1581	NISE FM
1653	KVITNOS FM
1770	CROMER KNOLL GP
1770	LYR FM
1806	VIKING GP
1806	SPEKK FM
1827	GREY BEDS (INFORMAL)
1850	RED BEDS (INFORMAL)
2959	BASEMENT

Composite logs

Document name	Document format	Document size [MB]
1927	pdf	0.45

Geochemical information

Document name	Document format	Document size [MB]
1927_1	pdf	2.33

Documents - older Norwegian Offshore Directorate WDSS reports and other related documents

Document name	Document format	Document size [MB]
1927_01 WDSS General Information	pdf	0.44
1927_02 WDSS completion log	pdf	0.19



**Documents - reported by the production licence (period for duty of secrecy expired)**

Document name	Document format	Document size [MB]
1927_6407_10_3_COMPLETION_REPORT_AND_LOG	pdf	13.89

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CST GR	1787	2952
DIL LDL CNL GR SP AMS	1450	2963
DIL LSS LDL GR SP AMS	803	1768
FMS-4 GR CAL	1775	2973
LSS GR AMS	1775	2973
MWD - GR RES DIR	347	2973
RFT HP GR	2463	2687
VDL GR	1185	1775
VSP	850	2450
VSP	2450	2950

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	434.0	36	436.0	0.00	LOT
INTERM.	18 5/8	802.0	26	804.0	1.59	LOT
INTERM.	13 3/8	1773.0	17 1/2	1775.0	1.94	LOT
OPEN HOLE		2973.0	12 1/4	2973.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
369	1.04			WATER BASED	
380	1.45	29.0		WATER BASED	
435	1.03			WATER BASED	
736	1.20	8.0		WATER BASED	
987	1.30	28.0		WATER BASED	





1344	1.37	23.0		WATER BASED	
1583	1.42	27.0		WATER BASED	
1656	1.26	26.0		WATER BASED	
1680	1.45	29.0		WATER BASED	
1788	1.39	21.0		WATER BASED	
1832	1.25	21.0		WATER BASED	
1953	1.25	23.0		WATER BASED	
2110	1.25	20.0		WATER BASED	
2136	1.25	22.0		WATER BASED	
2242	1.25	26.0		WATER BASED	
2349	1.25	25.0		WATER BASED	
2440	1.25	22.0		WATER BASED	
2489	1.25	24.0		WATER BASED	
2973	1.25	26.0		WATER BASED	

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]
1927 Formation pressure (Formasjonstrykk)	pdf	0.22

