

**General information**

Wellbore name	15/5-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	15/5-3
Seismic location	508 310 SP.606
Production licence	048
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	260-L
Drilling facility	NORTRYM
Drilling days	108
Entered date	21.08.1980
Completed date	07.12.1980
Release date	07.12.1982
Publication date	24.09.2015
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	110.0
Total depth (MD) [m RKB]	5042.0
Final vertical depth (TVD) [m RKB]	5031.0
Maximum inclination [°]	8
Bottom hole temperature [°C]	142
Oldest penetrated age	LATE PERMIAN
Oldest penetrated formation	NO GROUP DEFINED
Geodetic datum	ED50
NS degrees	58° 43' 47.93" N
EW degrees	1° 38' 12.05" E
NS UTM [m]	6510938.12
EW UTM [m]	421061.30
UTM zone	31
NPDID wellbore	207



Wellbore history

General

Well 15/5-3 was drilled in the Vilje Sub-basin between the Enoch and the Gudrun fields in the North Sea. The primary objective was to test possible sandstone reservoirs of Triassic age. A secondary objective was to test the Middle Jurassic Sleipner Formation. The well was planned to penetrate approximately 400 m into the Triassic and had a projected total depth of 4200 m.

Operations and results

After two unsuccessful spuds, wildcat well 15/5-3 was spudded with the semi-submersible installation Nortrym on 21 August 1980 and drilled to TD at 5042 m in shale and sandstones of Late Permian age. Hole reaming was necessary in intervals below 2250 m, otherwise the well was drilled without significant problems or incidents. The hole was good and vertical down to ca 3000 m. Below 3200 m the hole deviation increased to between 3° and 8°. The well was drilled with seawater and hi-vis sweeps down to 615 m, with a seawater/Dextrid mud from 615 m to 2029 m, with seawater/polymer/Q.Broxin mud from 2029 m to 3834 m, and with a salt-saturated Dextrid mud from 3834 to TD.

None of the objective sandstone reservoirs were found in the well. The Draupne Formation was encountered at 3665 m. After penetrating 135 m of Draupne shales, the well encountered 1050 m of Zechstein evaporites. At this point, it was decided to deepen the well further in order to explore the pre-salt rocks. Below these, undefined shales and thin sandstones of Late Permian age were found.

Traces of oil in the mud was observed during P&A - see below. Poor oil shows were recorded in thin limestone stringers at 2850 m, 2920, and in the interval 3355 to 3365 m. No shows were recorded in the pre-Zechstein shales and sand sequence.

Two cores were cut. Core 1 was cut from 3815 to 3834.4 m with 59.9% recovery. Core 2 was cut from 5038 to 5042 at TD with 94% recovery. No fluid samples were taken on wire line. However, while cutting the 9 5/8" casing during P&A, small amounts of oil were found floating on the drilling mud. The oil is assumed to originate from two 2-meter thick sandstone stringers at 1474 m and 1479 m in the top of the Grid Formation. From wire line log interpretation, these show high porosities and high hydrocarbon saturations.

The well was permanently abandoned on 7 December 2015 as a well with shows.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
200.00	5038.00

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	3815.0	3826.2	[m]
2	5038.0	5041.7	[m]

Total core sample length [m]	14.9
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1120.0	[m]	DC	UOS
1140.0	[m]	DC	UOS
1150.0	[m]	DC	UOS
1170.0	[m]	DC	UOS
1180.0	[m]	DC	UOS
1200.0	[m]	DC	UOS
1210.0	[m]	DC	UOS
1230.0	[m]	DC	UOS
1260.0	[m]	DC	UOS
1270.0	[m]	DC	UOS
1290.0	[m]	DC	UOS
1300.0	[m]	DC	UOS
1320.0	[m]	DC	UOS
1330.0	[m]	DC	UOS
1350.0	[m]	DC	UOS
1360.0	[m]	DC	UOS
1380.0	[m]	DC	UOS
1390.0	[m]	DC	UOS
1410.0	[m]	DC	UOS
1420.0	[m]	DC	UOS
1440.0	[m]	DC	UOS
1450.0	[m]	DC	UOS
1470.0	[m]	DC	UOS
1480.0	[m]	DC	UOS
1500.0	[m]	DC	UOS
1510.0	[m]	DC	UOS
1530.0	[m]	DC	UOS
1540.0	[m]	DC	UOS



1560.0	[m]	DC	UOS
1570.0	[m]	DC	UOS
1590.0	[m]	DC	UOS
1600.0	[m]	DC	UOS
1620.0	[m]	DC	UOS
1630.0	[m]	DC	UOS
1650.0	[m]	DC	UOS
1660.0	[m]	DC	UOS
1680.0	[m]	DC	UOS
1690.0	[m]	DC	UOS
1710.0	[m]	DC	UOS
1720.0	[m]	DC	UOS
1740.0	[m]	DC	UOS
1760.0	[m]	DC	UOS
1770.0	[m]	DC	UOS
1790.0	[m]	DC	UOS
1800.0	[m]	DC	UOS
1810.0	[m]	DC	UOS
1820.0	[m]	DC	UOS
1830.0	[m]	DC	UOS
1840.0	[m]	DC	UOS
1850.0	[m]	DC	UOS
1860.0	[m]	DC	UOS
1870.0	[m]	DC	UOS
1880.0	[m]	DC	UOS
1890.0	[m]	DC	UOS
1900.0	[m]	DC	UOS
1910.0	[m]	DC	UOS
1920.0	[m]	DC	UOS
1930.0	[m]	DC	UOS
1940.0	[m]	DC	UOS
1950.0	[m]	DC	UOS
1960.0	[m]	DC	UOS
1970.0	[m]	DC	UOS
1980.0	[m]	DC	UOS
1990.0	[m]	DC	UOS
2000.0	[m]	DC	UOS
2010.0	[m]	DC	UOS
2020.0	[m]	DC	UOS
2040.0	[m]	DC	UOS



2045.0	[m]	DC	UOS
2050.0	[m]	DC	UOS
2060.0	[m]	DC	UOS
2070.0	[m]	DC	UOS
2080.0	[m]	DC	UOS
2090.0	[m]	DC	UOS
2105.0	[m]	DC	UOS
2115.0	[m]	DC	UOS
2125.0	[m]	DC	UOS
2135.0	[m]	DC	UOS
2145.0	[m]	DC	UOS
2155.0	[m]	DC	UOS
2165.0	[m]	DC	UOS
2175.0	[m]	DC	UOS
2185.0	[m]	DC	UOS
2190.0	[m]	DC	UOS
2200.0	[m]	DC	UOS
2210.0	[m]	DC	UOS
2220.0	[m]	DC	UOS
2230.0	[m]	DC	UOS
2240.0	[m]	DC	UOS
2250.0	[m]	DC	UOS
2260.0	[m]	DC	UOS
2270.0	[m]	DC	UOS
2280.0	[m]	DC	UOS
2290.0	[m]	DC	UOS
2300.0	[m]	DC	UOS
2310.0	[m]	DC	UOS
2320.0	[m]	DC	UOS
2330.0	[m]	DC	UOS
2340.0	[m]	DC	UOS
2350.0	[m]	DC	UOS
2360.0	[m]	DC	UOS
2370.0	[m]	DC	UOS
2380.0	[m]	DC	UOS
2390.0	[m]	DC	UOS
2400.0	[m]	DC	UOS
2410.0	[m]	DC	UOS
2420.0	[m]	DC	UOS
2430.0	[m]	DC	UOS



2440.0	[m]	DC	UOS
2450.0	[m]	DC	UOS
2460.0	[m]	DC	UOS
2470.0	[m]	DC	UOS
2480.0	[m]	DC	UOS
2490.0	[m]	DC	UOS
2500.0	[m]	DC	UOS
2510.0	[m]	DC	UOS
2520.0	[m]	DC	UOS
2530.0	[m]	DC	UOS
2540.0	[m]	DC	UOS
2550.0	[m]	DC	UOS
2560.0	[m]	DC	UOS
2570.0	[m]	DC	UOS
2580.0	[m]	DC	UOS
2590.0	[m]	DC	UOS
2600.0	[m]	DC	UOS

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
135	NORDLAND GP
135	NAUST FM
720	UTSIRA FM
822	HORDALAND GP
822	NO FORMAL NAME
880	NO FORMAL NAME
1765	NO FORMAL NAME
1774	GRID FM
2055	ROGALAND GP
2055	BALDER FM
2100	SELE FM
2153	LISTA FM
2180	HEIMDAL FM
2595	SHETLAND GP
2595	EKOFISK FM
2668	TOR FM
2877	HOD FM
3419	HIDRA FM



3510	CROMER KNOLL GP
3510	RØDBY FM
3579	SOLA FM
3612	ÅSGARD FM
3665	VIKING GP
3665	DRAUPNE FM
3800	ZECHSTEIN GP
4850	UNDEFINED GP

Geochemical information

Document name	Document format	Document size [MB]
207_GCH_1	pdf	0.07
207_GCH_2	pdf	1.35

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

Document name	Document format	Document size [MB]
207_01_WDSS_General_Information	pdf	0.25
207_02_WDSS_completion_log	pdf	0.32

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

Document name	Document format	Document size [MB]
207_15_5_3_COMPLETION_LOG	pdf	196.79
207_15_5_3_COMPLETION_REPORT	pdf	9.26

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CDM	2002	5046
FDC CNL GR	606	5045
ISF SON GR	135	5044
TEMP	145	3488
VELOCITY	198	5044



**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	173.0	36	173.0	0.00	LOT
SURF.COND.	20	580.0	26	590.0	1.44	LOT
INTERM.	13 3/8	1977.0	17 1/2	2004.0	1.74	LOT
INTERM.	9 5/8	3500.0	12 1/4	3519.0	2.01	LOT
LINER	7	4835.0	8 1/2	4838.0	2.22	LOT
OPEN HOLE		5017.0	5 7/8	5017.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
270	1.06			waterbased	
820	1.13	46.0		waterbased	
1710	1.13	47.0		waterbased	
2004	1.26	50.0		waterbased	
2696	1.26	51.0		waterbased	
2997	1.27	45.0		waterbased	
3690	1.80	55.0		waterbased	
4627	1.86	61.0		waterbased	