

**General information**

Wellbore name	6407/12-3
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	6407/12-3
Seismic location	Survey-RX07M01-inline 7091 & crossline 2727
Production licence	470
Drilling operator	Centrica Resources (Norge) AS
Drill permit	1310-L
Drilling facility	WEST ALPHA
Drilling days	20
Entered date	14.05.2010
Completed date	02.06.2010
Release date	03.10.2011
Publication date	03.10.2011
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	18.0
Water depth [m]	288.0
Total depth (MD) [m RKB]	1968.0
Final vertical depth (TVD) [m RKB]	1968.0
Maximum inclination [°]	2
Bottom hole temperature [°C]	70
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	ILE FM
Geodetic datum	ED50
NS degrees	64° 14' 17.73" N
EW degrees	7° 48' 54.34" E
NS UTM [m]	7124275.91
EW UTM [m]	442537.32
UTM zone	32
NPDID wellbore	6370



Wellbore history

General

Well 6407/12-3 was drilled on the Caerus prospect in the Froan Basin, ca 4 km east of the southern end of the Draugen Field in the Norwegian Sea. The primary objective was to evaluate the hydrocarbon potential in the Late Jurassic Rogn Formation within the license PL 470. Secondary objective was to check for hydrocarbon presence in the Middle Jurassic Garn and Ile Formations.

Operations and results

Wildcat well 6407/12-3 was spudded with the semi-submersible installation West Alpha on 14 May 2010. Drilling started with a pilot hole down to 1080 m to confirm no shallow gas. The pilot was opened up with 36" and 26" hole openers and further drilling commenced without significant problems to TD at 1968 m in the Middle Jurassic Ile Formation. The well was drilled with seawater and hi-vis sweeps down to 1080 m and with KCl/Glydril WBM from 1080 m to TD.

The expected thin section of the Shetland Group was missing. Based on biostratigraphic analyses the formation changes directly from the Tertiary Tang Formation to the Early Cretaceous Lange Formation. Top Viking Group, Spekk Formation was encountered at 1629.5 m. The primary prospect Rogn Formation, an intra-Spekk deposit, was not seen. However, biostratigraphic analyses suggested a shaly time equivalent deposition might exist. The secondary prospect, the Garn Formation did not come in as prognosed, instead an intra-Melke Formation (according to biostratigraphy) sandstone deposition was encountered at the prognosed depth for the Garn Sandstone, from 1781 to 1816 m. The Garn Formation came in deeper, from 1828 to 1890 m. This was however a very shaly deposits with only minor sandstone beds. This is also known from some other wells in the area, but no wells have the thickness of the formation as seen in the Caerus well.

The well was dry. Gas levels were generally low throughout the well and there were no hydrocarbons according to the logs. No oil shows were recorded.

No cores were cut. Pressure points were acquired with the XPT tool. No wire line fluid samples were taken.

The well was permanently abandoned on 2 June 2010 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]
1090.00	1968.00

Cuttings available for sampling?	YES
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**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
306	NORDLAND GP
306	NAUST FM
558	KAI FM
678	HORDALAND GP
678	BRYGGE FM
1169	ROGALAND GP
1169	TARE FM
1286	TANG FM
1486	CROMER KNOLL GP
1486	LANGE FM
1598	LYR FM
1630	VIKING GP
1630	SPEKK FM
1727	MELKE FM
1781	INTRA MELKE FM SS
1816	MELKE FM
1828	FANGST GP
1828	GARN FM
1890	NOT FM
1921	ILE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DSI HRLA PEX XPT GR ECRD	1571	1950
LWD - DI	306	1080
LWD - GR RES APWD DI SON	306	1082
LWD - GR RES APWD DI SON	1080	1968
VSP	306	1960

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	384.0	36	386.0	0.00	LOT



SURF.COND.	13 3/8	1068.0	17 1/2	1080.0	1.50	LOT
INTERM.	9 5/8	1572.0	12 1/4	1575.0	1.50	LOT
OPEN HOLE		1968.0	8 1/2	1968.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
294	1.02			Hi Vis sweep	
391	1.59	22.0		Kill mud	
1080	1.29	29.0		Disp. mud	
1349	1.29	20.0		Glydril WBM	
1688	1.29	19.0		Glydril	
1968	1.29	20.0		Glydril	