

**General information**

Wellbore name	33/12-10 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	33/12-10
Seismic location	WIN0901LNR13:inline 691 crossline 1453
Production licence	631
Drilling operator	Lundin Norway AS
Drill permit	1525-L
Drilling facility	BREDFORD DOLPHIN
Drilling days	55
Entered date	30.08.2014
Completed date	23.10.2014
Release date	05.07.2016
Publication date	05.07.2016
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	140.0
Total depth (MD) [m RKB]	3097.0
Final vertical depth (TVD) [m RKB]	3089.2
Maximum inclination [°]	7.8
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	HEATHER FM
Geodetic datum	ED50
NS degrees	61° 7' 7.83" N
EW degrees	1° 56' 28.67" E
NS UTM [m]	6776647.02
EW UTM [m]	442952.09
UTM zone	31
NPDID wellbore	7486



Wellbore history

General

Well 33/12-10 S was drilled to test the Vollgrav prospect, between the Gullfaks Sør Field and the UK border in the Tampen Spur area of the North Sea. The primary objective of the well was to prove the reservoir potential and hydrocarbons in an untested Late Jurassic depositional wedge of Draupne Formation sandstone, Munin and Magnus members, seen in the Borg Field to the north of the prospect. The secondary objective of the well was to test the reservoir and hydrocarbon potential of the overlying injectite embedded in sediments of early Eocene age. The TD criterion was to drill to approximately 3075 m, into the Late Jurassic Heather Formation.

Operations and results

Wildcat well 33/12-10 S was spudded with the semi-submersible installation Bredford Dolphin on 30 August 2014 and drilled to TD at 3097 m (3089 m TVD) m in the Late Callovian sediments belonging to the Heather Formation. No significant problem was encountered in the operations. The well was drilled with seawater and hi-vis sweeps down to 454.5 m and with Aquadril mud from 454.5 m to TD.

The Draupne Formation interval was encountered at 2944 m (2936 m TVD), 40 m deep to prognosis. The prognosed Intra Draupne Formation sandstones were not present in the well. Sandstone was found in the secondary Eocene target at 1686.5 m (1686.3 m TVD) but these did not show any signs of hydrocarbons. Fluorescence was described in limestones in a thin Cromer Knoll Group overlying the Viking Group, and throughout the shales of the Viking Group. No real oil show in permeable lithology was recorded in the well.

A total of 32.2 m core was cut in the interval 2938 m to 2970.5 m with 99.1% total recovery. No logs were run on wireline due to dry hole. No fluid samples were taken.

The well was permanently abandoned on 23 October 2014 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]
460.00	3096.00

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	2938.0	2938.5	[m]



2	2938.5	2943.3	[m]
3	2943.5	2970.4	[m]

Total core sample length [m]	32.2
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
165	NORDLAND GP
165	NO FORMAL NAME
327	UNDIFFERENTIATED
848	UTSIRA FM
927	UNDIFFERENTIATED
1007	HORDALAND GP
1007	NO FORMAL NAME
1050	NO FORMAL NAME
1494	NO FORMAL NAME
1687	UNDIFFERENTIATED
1725	NO FORMAL NAME
1815	ROGALAND GP
1815	BALDER FM
1870	SELE FM
1891	LISTA FM
2029	VÅLE FM
2060	SHETLAND GP
2060	JORSALFARE FM
2305	KYRRE FM
2333	UNDIFFERENTIATED
2362	KYRRE FM
2933	CROMER KNOLL GP
2933	MIME FM
2944	VIKING GP
2944	DRAUPNE FM
3064	HEATHER FM

Logs



Log type	Log top depth [m]	Log bottom depth [m]
LWD-GR ECD RES DIR SON	164	453
LWD-GR RES PWD DIR SON	454	1582
LWD-NBGR RES ECD DEN NEU SON	2823	3096
LWD-NBRES NBGR ECD DIR DEN NEU S	1582	2823

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	231.0	36	231.0	0.00	
SURF.COND.	20	448.7	26	454.5	1.49	LOT
PILOT HOLE		455.0	9 7/8	455.0	0.00	
INTERM.	13 3/8	1574.0	17 1/2	1582.0	1.77	LOT
PROD.	9 5/8	2814.0	12 1/4	2823.0	1.89	LOT
OPEN HOLE		3097.0	8 1/2	3097.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
198	1.03	108.0		Water Based	
233	1.40	108.0		Water Based	
349	1.30	15.0		Water Based	
454	1.40	24.0		Water Based	
757	1.25	16.0		Water Based	
1364	1.52	23.0		Water Based	
1582	1.30	21.0		Water Based	
1839	1.52	29.0		Water Based	
2409	1.52	21.0		Water Based	
2679	1.52	25.0		Water Based	
2814	1.53	26.0		Water Based	
2823	1.52	28.0		Water Based	
2874	1.50	22.0		Water Based	
2939	1.51	23.0		Water Based	
2950	1.50	22.0		Water Based	

