



General information

Wellbore name	15/12-22
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	15/12-22
Seismic location	PR08M01-inline 3217&xline4763
Production licence	337
Drilling operator	Det norske oljeselskap ASA
Drill permit	1295-L
Drilling facility	BREDFORD DOLPHIN
Drilling days	30
Entered date	17.04.2010
Completed date	16.05.2010
Release date	17.12.2010
Publication date	15.06.2010
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	82.5
Total depth (MD) [m RKB]	3035.0
Final vertical depth (TVD) [m RKB]	3035.0
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50
NS degrees	58° 12' 12.3" N
EW degrees	1° 59' 14.4" E
NS UTM [m]	6451951.66
EW UTM [m]	440480.33
UTM zone	31
NPDID wellbore	6326



Wellbore history

General

The 15/12-22 Storkollen well was drilled south of the Sleipner East Field in the south Viking Graben of the North Sea. The objective was to test the hydrocarbon and reservoir potential of the Storkollen prospect. Primary target was Oxfordian "Varg Equivalent sandstone" (Hugin Formation) of the Vestland Group, while the Early Tertiary Heimdal/Ty Formations was a secondary target.

Operations and results

Wildcat well 15/12-22 was spudded with the semi-submersible installation Bredford Dolphin on 17 April 2010 and drilled to TD at 3035 m in the Late Triassic Skagerrak Formation. A shallow gas influx occurred at 697-700 m while waiting on weather (low wind) after having drilled the 9 7/8" pilot hole to 744 m. The interval had an intermediate shallow gas warning. The gas influx was killed with 1.25 GS mud, and the pilot hole was plugged back for setting the contingent 20" casing with the shoe at 622 m. The well was drilled with seawater/bentonite and hi-vis sweeps down to 622 m, with KCl/polymer/GEM mud from 622 m to 1550 m, and with XP-07 oil based mud from 1550 m to TD.

Tertiary sands were penetrated in the Utsira and Skade formations, while the Frigg Formation sandstones were not encountered at the Storkollen location. The secondary target, the Paleocene Heimdal/Ty Formations was not present, and Top Shetland chalks were penetrated at 2320 m, which was 16 m shallower than prognosed. The primary reservoir target, the Hugin Formation of the Vestland Group, was penetrated at 2831 m, which was 22 m shallower than prognosed. The sandstone unit was 154 m thick and had excellent quality with a N/G ratio of 96% and an average porosity of 25%. It was water bearing. GeoTap pressure measurements within the Hugin Formation detected an overpressure of only 42 bars, compared to normal hydrostatic pressure. The low overpressures may indicate compartmentalisation, thus explaining failed migration into the Storkollen 4-way closure. Apart from the shallow gas influx no oil or gas shows are reported from the well.

No cores were cut. The well was logged on MWD/LWD and no wire line logs were run. No wire line fluid samples were taken.

The well was permanently abandoned on 16 May 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]
630.00	3035.00

Cuttings available for sampling?	YES
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Lithostratigraphy



Top depth [mMD RKB]	Lithostrat. unit
109	NORDLAND GP
929	UTSIRA FM
1094	HORDALAND GP
1208	SKADE FM
1229	NO FORMAL NAME
2125	ROGALAND GP
2125	BALDER FM
2151	SELE FM
2233	LISTA FM
2317	VÅLE FM
2320	SHETLAND GP
2320	EKOFISK FM
2324	TOR FM
2541	HOD FM
2610	BLODØKS FM
2643	HIDRA FM
2676	CROMER KNOLL GP
2676	RØDBY FM
2683	SOLA FM
2704	TUXEN FM
2730	ÅSGARD FM
2764	VIKING GP
2764	DRAUPNE FM
2799	HEATHER FM
2831	VESTLAND GP
2831	HUGIN FM
2985	NO GROUP DEFINED
2985	SKAGERRAK FM

Geochemical information

Document name	Document format	Document size [MB]
6326_01_15_12_22_gch_transfer_1	txt	0.00
6326_02_15_12_22_gch_results_1	txt	0.01

Logs





Log type	Log top depth [m]	Log bottom depth [m]
MWD LWD - DGR EWR ALD CTN BAT PW	1550	3035
MWD LWD - DIR	108	174
MWD LWD - DIR PWD	174	628
MWD LWD - EWR GR PWD DIR	174	744
MWD LWD - EWR GR PWD DIR	628	1550

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	174.0	36	174.0	0.00	LOT
SURF.COND.	20	622.0	26	628.0	1.93	LOT
PILOT HOLE		628.0	9 7/8	628.0	0.00	LOT
INTERM.	13 3/8	1541.0	17 1/2	1550.0	1.84	LOT
OPEN HOLE		3035.0	12 1/4	3035.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
110	1.04			PHB (Sweeps)	
178	1.25			Kill Mud	
439	1.04			Kill Mud	
628	1.20	18.0		KCI/GEM	
631	1.20	16.0		KCI/GEM	
863	1.20	17.0		KCI/GEM	
1550	1.25	22.0		KCI/GEM	
1611	1.25	14.0		XP-07	
3035	1.35	19.0		XP-07	