General information

Wellbore name	25/1-13
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	25/1-13
Seismic location	Inline 36030 xline 136960
Production licence	871
Drilling operator	Wellesley Petroleum AS
Drill permit	1749-L
Drilling facility	TRANSOCEAN ARCTIC
Drilling days	20
Entered date	20.02.2019
Completed date	11.03.2019
Plugged and abondon date	11.03.2019
Release date	11.03.2021
Publication date	30.04.2021
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	24.0
Water depth [m]	109.0
Total depth (MD) [m RKB]	2150.0
Final vertical depth (TVD) [m RKB]	2150.0
Oldest penetrated age	PALEOCENE
Oldest penetrated formation	BALDER FM
Geodetic datum	ED50
NS degrees	59° 49' 15.46'' N
EW degrees	2° 16' 37.04'' E
NS UTM [m]	6631848.15
EW UTM [m]	459451.05
UTM zone	31
NPDID wellbore	8658

Wellbore history

General

Well 25/1-13 was drilled to test the Balcom prospect in the Volve Sub-basin in the North Sea. The primary objective was to test the hydrocarbon potential in the Frigg Formation and intra-Balder Formation sandstone (Odin Informal Formation).

Operations and results

Wildcat well 25/1-13 was spudded with the semi-submersible installation Transocean Arctic on 20 February 2019 and drilled to TD at 2150 m in intra-Balder Formation sandstones. A 9 7/8" shallow gas pilot hole was drilled from 192 to 1059 m. No shallow gas was encountered. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 1059 m and with Innovert oil-based mud from 1059 m to TD.

Wildcat well 25/1-13 encountered the Frigg formation with a thickness of 56 metres, with water wet sandstone layers totalling 10 metres, mainly with good reservoir quality. The underlying upper part of the Balder formation in the Eocene to Palaeocene was about 40 metres, with water wet sandstone layers totalling 20 metres with good to very good reservoir quality. Petrophysical analysis and mud gas indicate gas in the top sandstone layers in the Frigg Formation, but with high water saturation. Otherwise the well was dry. There were no shows above the OBM.

No cores were cut. No fluid sample was taken. Geotap pressure points were attempted but failed.

The well was permanently abandoned on 11 March 2019 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]
1070.00	2150.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
133	NORDLAND GP
133	NAUST FM
353	UTSIRA FM
413	HORDALAND GP

413	NO FORMAL NAME
584	SKADE FM
976	NO FORMAL NAME
1445	NO FORMAL NAME
2063	FRIGG FM
2119	ROGALAND GP
2119	BALDER FM
2123	NO FORMAL NAME

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - APWD RES GR DIR	197	1059
LWD - APWD RES GR NEU DEN SON PF	1994	2150
LWD - APWD RES GR SON DIR	197	1994
LWD - DIR	133	197

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	197.0	36	197.4	0.00	
INTERM.	13 3/8	1053.0	17 1/2	1059.0	1.62	FIT
PILOT HOLE		1059.0	9 7/8	1059.0	0.00	
INTERM.	9 5/8	1988.0	12 1/4	1994.0	1.65	FIT
OPEN HOLE		2150.0	8 1/2	2150.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
133	1.49	18.0		Kill mud	
507	1.24	15.0		Kill mud	
507	1.04	10.0		Hi-vis sweep	
1059	1.02	8.0		Hi-vis sweep	
1059	1.24	16.0		Kill mud	
1180	1.24	21.0		INNOVERT Yellow	
2031	1.23	18.0		INNOVERT Yellow	

2150	1.02	1.0		INNOVERT Yellow	
2150	1.24	21.0		INNOVERT Yellow	