

**General information**

Wellbore name	34/6-3 A
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	34/6-3 A (Akkar)
Well name	34/6-3
Seismic location	MC3D-B34-6T06 PSDM
Production licence	554
Drilling operator	Total E&P Norge AS
Drill permit	1546-L
Drilling facility	LEIV EIRIKSSON
Drilling days	34
Entered date	25.09.2014
Completed date	01.11.2014
Plugged and abandon date	01.11.2014
Release date	01.11.2016
Publication date	01.11.2016
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	EARLY JURASSIC
1st level with HC, formation	COOK FM
Kelly bushing elevation [m]	25.0
Water depth [m]	380.5
Total depth (MD) [m RKB]	4019.0
Final vertical depth (TVD) [m RKB]	3749.3
Maximum inclination [°]	43.4
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	STATFJORD GP
Geodetic datum	ED50
NS degrees	61° 34' 29.55" N
EW degrees	2° 43' 48.69" E
NS UTM [m]	6827015.07
EW UTM [m]	485670.96



UTM zone	31
NPDID wellbore	7587

Wellbore history

General

The 34/6-3 A Akkar well is a geological sidetrack of 34/6-3 S, which confirmed oil in the Cook Formation in the Garantiana structure. The well is located in the Visund are of the North Sea. The primary objective of well 34/6-3 A was to test the hydrocarbon potential in the Akkar prospect, a separate structure located to the west of the Garantiana structure. The primary target was the Statfjord Group. The Cook Formation was secondary target. In 2002 well 34/6-1 S tested the Akkar structure further to the west than 34/6-3 A and found it water wet.

Operations and results

Wildcat well 34/6-3 A was kicked off from the 34/6-3 S well below the 13 3/8" casing shoes at 2049 m on 25 September 2014. It was drilled with the semi-submersible installation Leiv Eiriksson to TD at 4019 m (3749 m TVD) m in the Early Jurassic Statfjord Group. The well was drilled S-shaped: vertical down to ca 2100 m, deviated with a sail angle of ca 42 ° down to ca 3400 m, and then vertical again to TD. No significant problem was encountered in the operations. The well was drilled with NABM oil based mud from kick-off to 3510 m, and with WARP oil based mud from 351 m to TD.

Well 34/6-3 A penetrated top Cook Formation at 3603 m (3336 m TVD). The Cook Formation was oil bearing with the Oil-Water-Contact defined at 3650 m (3381.5 m TVD). Cook sandstones below the OWC, from 3675 m down to top Burton Formation at 3717 m (3447 m TVD) had good oil shows. The pressure points acquired in the water leg of the Cook Formation align with the gradient from 34/6-1 S. The Statfjord Group proved to be water bearing without shows.

No cores were cut in 34/6-3 A. MDT fluid samples were taken at 3628.62 m (oil), 3683.69 m (water with possible traces of hydrocarbons) and 3701.49 m (water with possible traces of hydrocarbons).

The well was permanently abandoned on 1 November 2014 as an oil discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
2120.00	4015.00

Cuttings available for sampling?	YES
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**Lithostratigraphy**

Top depth [mMD RKB]	Lithostrat. unit
406	NORDLAND GP
406	UNDIFFERENTIATED
1246	HORDALAND GP
1246	UNDIFFERENTIATED
1849	ROGALAND GP
1849	BALDER FM
2017	SHETLAND GP
2017	JORSALFARE FM
2245	KYRRE FM
3363	TRYGGVASON FM
3501	SVARTE FM
3534	VIKING GP
3534	UNDIFFERENTIATED
3544	DUNLIN GP
3544	DRAKE FM
3603	COOK FM
3717	BURTON FM
3727	AMUNDSEN FM
3953	STATFJORD GP

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL GR	2902	3490
LWD - GR RES NEU DEN SON DI	3510	3601
LWD - GR RES NEU DEN SON DI	3601	4019
LWD - GR RES SON DI	2070	3510
MDT GR	3500	3819
SWC GR	3550	3750

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	472.0	36	472.5	0.00	
SURF.COND.	20	1494.0	26	1500.0	0.00	



INTERM.	13 3/8	2049.0	17 1/2	2058.0	1.92	LOT
INTERM.	9 7/8	3500.0	12 1/4	3510.0	1.96	FIT
OPEN HOLE		4019.0	8 1/2	4019.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
2777	1.65	43.0		NABM	
3191	1.67	50.0		NABM	
3400	1.71	53.0		NABM	
3516	1.82	37.0		NABM	
3601	1.81	42.0		NABM	
4019	1.82	41.0		NABM	