General information

Wellbore name	34/6-2 A
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	34/6-2 S (Garantiana)
Well name	34/6-2
Seismic location	BE1101-1208.SP2248
Production licence	554
Drilling operator	Total E&P Norge AS
Drill permit	1425-L
Drilling facility	BORGLAND DOLPHIN
Drilling days	38
Entered date	05.11.2012
Completed date	12.12.2012
Release date	12.12.2014
Publication date	11.03.2015
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	EARLY JURASSIC
1st level with HC, formation	COOK FM
Kelly bushing elevation [m]	31.0
Water depth [m]	385.5
Total depth (MD) [m RKB]	3974.0
Final vertical depth (TVD) [m RKB]	3840.0
Maximum inclination [°]	47.6
Oldest penetrated age	EARLY TRIASSIC
Oldest penetrated formation	COOK FM
Geodetic datum	ED50
NS degrees	61° 35' 24.47'' N
EW degrees	2° 45' 14.08'' E
NS UTM [m]	6828709.52
EW UTM [m]	486937.08
UTM zone	31
NPDID wellbore	7059

Wellbore history

General

Well 34/6-2 A is a sidetrack to well 34/6-2 S on the Garantiana prospect on the northern continuation of the Visund structure on Tampen Spur in the North Sea. The primary well 34/6-2 S found oil in an oil-down-to setting in the Early Jurassic Cook Formation. The objective of the sidetrack well was to penetrate the oil-water contact. No secondary objectives were defined.

Operations and results

Well 34/6-2 A was kicked off from 3153 m in primary well bore 34/6-2 S on 5 November 2012. The semi-submersible installation Borgland Dolphin drilled the sidetrack to TD at 3974 m (3840 m TVD) in the Early Jurassic Cook Formation. Drilling to TD proceeded without significant problems. Seventeen days were counted as non-productive time after reaching TD due to logging problems, fishing for a lost LWD component, and leak in the choke line. The well was drilled with Carbo-Sea NABM mud from kick-off to TD.

The Cook Formation was encountered at 3701 m. It was oil bearing with a water-up-to contact 3753.7 m (3688.3 m TVD). Well 34/6-2 S found oil down-to 3705 m (3671 m TVD). Pressure data from the two well bores did not prove a better definition of the oil-water contact, and several pressure cells could be present. The oil sample further down, at 3857. 8 m (3760.7 m TVD) and depleted pressure points may represent a separate compartment. Very weak blue/white fluorescence shows were recorded throughout the Cook Formation down to 3974 m.

No cores were cut in 34/6-2 A. RCI fluid samples were taken at 3753.7 m (water with 4% oil) and 3857.8 m (oil and water).

The well was permanently abandoned on 12 December 2012 as an oil appraisal well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
3160.00	3974.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
417	NORDLAND GP
1268	UTSIRA FM

1321	HORDALAND GP
1849	ROGALAND GP
1849	BALDER FM
1872	SELE FM
1880	LISTA FM
2022	VÅLE FM
2035	SHETLAND GP
2035	JORSALFARE FM
2273	KYRRE FM
3207	TRYGGVASON FM
3413	CROMER KNOLL GP
3413	SOLA FM
3478	BRENT GP
3478	RANNOCH FM
3547	DUNLIN GP
3547	DRAKE FM
3702	COOK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - RES GR ECD DI FAS MR	3215	3974
MWD - RES GR ECD DI FAS SON MR	3700	3974
MWD - RES GR PWD DI	3152	3160
TLC GR RCI SAMPLE	3723	3856
TLC GR RCI SAMPLE	3730	3930

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
OPEN HOLE		3974.0	8 1/2	3974.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1385	1.41	13000.0		Polymer added mud	
2862	1.78	48000.0		NABM	
3215	1.70	30000.0		NABM	
3974	1.78	45000.0		NABM	