



General information





Wellbore name	8/10-4 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
Field	ODA
Discovery	8/10-4 S Oda
Well name	8/10-4
Seismic location	site survey lines CE1001 D 22A and CE1001 D 19
Production licence	405
Drilling operator	Centrica Resources (Norge) AS
Drill permit	1383-L
Drilling facility	MÆRSK GUARDIAN
Drilling days	53
Entered date	27.10.2011
Completed date	18.12.2011
Release date	18.12.2013
Publication date	18.12.2013
Purpose - planned	APPRAISAL
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	44.0
Water depth [m]	66.0
Total depth (MD) [m RKB]	3639.0
Final vertical depth (TVD) [m RKB]	3360.0
Maximum inclination [°]	48.2
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50
NS degrees	57° 3' 53.79" N
EW degrees	3° 2' 43.41" E
NS UTM [m]	6324757.70
EW UTM [m]	502752.78
UTM zone	31
NPDID wellbore	6737



Wellbore history

General

Well 8/10-4 A was drilled as a sidetrack to the Butch prospect discovery well, 8/10-4 S on the Sørvestlandet High the North Sea. The discovery well found oil in the Late Jurassic Ula Formation. The objective of the sidetrack was to identify an OWC.

Operations and results

Well 8/10-4 A was drilled with the jack-up installation Mærsk Guardian. It was sidetracked from a window in the 9 5/8" casing of 8/10-4 S at 2266 m in the upper part of the Balder Formation. Inclination was increased from vertical at kick-off point to 46.6 deg at top Ula Formation; along an azimuth of approximately 298 deg N. Total step-out from kick-off point was 724 m. The well was drilled to 3639 m (3360 m TVD) in the Late Triassic Skagerrak Formation. Here, well instability problems precluded the running of wire line logs, necessitating the drilling of a technical sidetrack. Technical sidetrack 8/10-4 A T2 was kicked off from Well 8/10-4 A at 2852 m in the uppermost part of the Rødby Formation and drilled in the same direction along a much reduced inclination, from 33.5 deg at kick-off to 22 deg at final TD. This sidetrack reached a TD at 3293 m (3203 m TVD) in the Late Triassic Skagerrak Formation. Both well bores were drilled with oil based mud from kick-off to TD.

Sidetrack 8/10-4 A penetrated top Ula Formation at 3432.6 m (3178.3 m TVD MSL), while the T2 sidetrack penetrated top Ula at 3196.7 m (3070 m TVD MSL). The Ula Formation was water wet in both well bores, and there were no indications of migrated hydrocarbons anywhere else in the well bores. RDT pressure measurements in the water leg of 8/10-4 A T2 combined with the RDT pressure measurements in 8/10-4 S oil column gave a very accurate location of the OWC at 2985 m TVD MSL.

No cores were cut. Three RDT water samples were taken at 3199 m.

A decision was made to evaluate the south-western segment of the Butch prospect, via a new relatively long, high angle sidetrack. The well was plugged back and prepared for sidetrack to well 8/10-4 B on 18 December 2011. It is classified as an oil appraisal.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
2280.00	3639.00

Cuttings available for sampling?	YES
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Lithostratigraphy



Top depth [mMD RKB]	Lithostrat. unit
110	NORDLAND GP
1380	HORDALAND GP
2258	ROGALAND GP
2258	BALDER FM
2288	SELE FM
2307	LISTA FM
2475	VIDAR FM
2495	VÅLE FM
2502	SHETLAND GP
2502	EKOFISK FM
2556	TOR FM
2695	HOD FM
2846	CROMER KNOLL GP
2846	RØDBY FM
2883	SOLA FM
2907	TUXEN FM
2922	ÅSGARD FM
3278	TYNE GP
3278	MANDAL FM
3334	FARSUND FM
3432	VESTLAND GP
3432	ULA FM
3602	SKAGERRAK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - DGR ADR ALD CTN BAT PWD AB	2384	3637
MWD - DGR ADR PWD	2254	2408
MWD - DGR ADR PWD	2722	3285
RDT GR	3199	3255

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	218.6	36	226.0	0.00	LOT
INTERM.	13 3/8	1001.0	17 1/2	1011.0	0.00	LOT
PILOT HOLE		1011.0	9 7/8	1011.0	0.00	LOT
INTERM.	9 5/8	2266.0	12 1/4	2266.0	0.00	LOT
OPEN HOLE		3639.0	8 1/2	3639.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
450	1.46	31.0		ENVIROMUL	
700	1.46	38.0		Enviromul	
963	1.52	40.0		Enviromul	
1011	1.52	36.0		Enviromul	
1105	1.52	50.0		Enviromul	
1380	1.44	33.0		ENVIROMUL	
2257	1.59	47.0		Enviromul	
2412	1.44	33.0		Enviromul	
2438	1.46	31.0		ENVIROMUL	
2662	1.46	30.0		ENVIROMUL	
2811	1.44	32.0		ENVIROMUL	
2844	1.46	38.0		Enviromul	
2914	1.44	32.0		ENVIROMUL	
2999	1.46	35.0		Enviromul	
3575	1.44	37.0		Enviromul	

Pressure plots

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

Document name	Document format	Document size [MB]
6737 Formation pressure (Formasjonstrykk)	pdf	0.23

