

General information

Wellbore name	35/9-12 S
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	35/9-12
Seismic location	RD1201 inline 2571 & xline 928
Production licence	420
Drilling operator	RWE Dea Norge AS
Drill permit	1540-L
Drilling facility	LEIV EIRIKSSON
Drilling days	53
Entered date	04.11.2014
Completed date	26.12.2014
Release date	26.12.2016
Publication date	26.12.2016
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	357.0
Total depth (MD) [m RKB]	3556.0
Final vertical depth (TVD) [m RKB]	3448.0
Maximum inclination [°]	26.8
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	RANNOCH FM
Geodetic datum	ED50
NS degrees	61° 15' 28.34" N
EW degrees	3° 44' 46.61" E
NS UTM [m]	6791901.08
EW UTM [m]	540036.99
UTM zone	31
NPDID wellbore	7552

Wellbore history

General

Well 35/9-12 S was drilled on the Uer Terrace in the North Sea, east of and adjacent to the 35/9-7 Skarfjell discovery. The objective was to test the hydrocarbon potential of the Atlas prospect. Primary targets were sandstones of Oxfordian age. Secondary targets were sandstones of Callovian age.

Operations and results

Wildcat well 35/9-12 S was spudded with the semi-submersible installation Leiv Eiriksson on 4 November 2014 and drilled to TD at 3556 m in the Middle Jurassic Rannoch Formation. No significant problem was encountered in the operations. The well was drilled with seawater/bentonite down to 449 m and with Glydril mud from 449 m to TD.

A seven-meter thick Oxfordian sandstone came in at 2950 m (2846 m TVD). Four Callovian sandstone sequences with thicknesses from 32 to 232 m TVD were penetrated between 3097 and 3492 m (2993 and 3385 m TVD). All sandstones were water bearing with shows. The shows were graded mostly as weak, but in the upper Callovian sandstone, from 3097 to 3135 m, the shows were graded fair, and traces of oil was recovered in MDT samples.

Two cores were cut from 2956 to 3064 m in the Oxfordian to Callovian sandstones. The core recovery was 100% recovery. The core-log depth shift is -1.0 m. MDT fluid samples were taken at 2956.09 m (water) and at 3098.72 m (water with traces of oil).

The well was permanently abandoned on 26 December as a dry well with residual shows.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
450.00	3555.00
Cuttings available for sampling?	YES

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2956.1	3009.7	[m]
2	3010.0	3064.5	[m]

Total core sample length [m]	108.0
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
382	NORDLAND GP
559	UTSIRA FM
624	HORDALAND GP
854	GRID FM
1000	ROGALAND GP
1000	BALDER FM
1057	SELE FM
1091	LISTA FM
1585	VÅLE FM
1635	SHETLAND GP
1635	JORSALFARE FM
1761	KYRRE FM
2601	BLODØKS FM
2610	SVARTE FM
2794	CROMER KNOLL GP
2794	RØDBY FM
2880	ÅSGARD FM
2921	VIKING GP
2921	DRAUPNE FM
2943	HEATHER FM
2950	SOgnefjord FM
2957	HEATHER FM
3097	FENSFJORD FM
3156	HEATHER FM
3225	FENSFJORD FM
3257	HEATHER FM
3492	BRENT GP
3492	TARBERT FM
3496	NESS FM
3526	ETIVE FM
3537	RANNOCH FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LEH QT ACTSB EDTCB AH199 VSPC VS	840	3523
MWD - DI	452	1011
MWD - DI PWD	382	452
MWD - GR PWD CAL RES NEU DEN SON	452	1011
MWD - GR PWD RES GR SON	1011	1679
MWD - GR PWD RES NEU DEN SON	1679	2865
MWD - GR RES PWD NEU DEN SON	2865	3556
PS HY PO IFA MS	1	3241

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	449.0	36	452.0	0.00	
SURF.COND.	20	1006.0	26	1011.0	1.41	FIT
PILOT HOLE		1011.0	9 7/8	1011.0	0.00	
INTERM.	13 3/8	1668.0	17 1/2	1679.0	1.61	FIT
INTERM.	9 5/8	2856.0	12 1/4	2865.0	1.69	FIT
OPEN HOLE		3556.0	8 1/2	3556.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
425	1.49	26.0		Spud mud	
646	1.34	18.0		Glydril	
1011	1.34	18.0		Glydril	
1011	1.02			SW	
1398	1.31	23.0		WBM	
1398	1.31	23.0		Glydril	
1679	1.34	21.0		WBM	
1912	1.29	19.0		Glydrill	
2640	1.25	14.0		Glydril	
2823	1.30	16.0		Glydrill	

3010	1.24	14.0		Glydril	
3556	1.24	16.0		Glydril	