General information

Wellbore name	9/1-1 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	9/1-1
Seismic location	MC3D-EGBS2008 inline 2411 & crossline 5334
Production licence	406
Drilling operator	Premier Oil Norge AS
Drill permit	1316-L
Drilling facility	BREDFORD DOLPHIN
Drilling days	52
Entered date	01.10.2011
Completed date	21.11.2011
Release date	10.08.2013
Publication date	10.08.2013
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	87.0
Total depth (MD) [m RKB]	2533.0
Final vertical depth (TVD) [m RKB]	2230.0
Maximum inclination [°]	42.1
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50
NS degrees	57° 53' 37.03'' N
EW degrees	4° 0' 56.02'' E
NS UTM [m]	6417463.91
EW UTM [m]	560208.89
UTM zone	31
NPDID wellbore	6398

Wellbore history

General

Well 9/1-1 S was drilled on the Gardrofa prospect in the Egersund Basin of the North Sea, roughly mid way between the Bream-Brisling Discoveries and the Yme Field. The Gardrofa prospect is created by salt tectonism. The primary objective was to test sandstones within the Middle Jurassic Bryne Formation.

Operations and results

Wildcat well 9/1-1 S was spudded with the semi-submersible installation Bredford Dolphin on 1 October 2011 and drilled to TD at 2533 m (2230 m TVD) in the Late Triassic Skagerrak Formation. A 9 7/8" pilot hole was drilled from 194 m to 759 m to check for shallow gas. No shallow gas was found. The well was planned and drilled deviated to avoid potential high pressure zones in the Paleocene (823 - 900 m). Operations were severely delayed by problems with the BOP. Waiting on necessary parts took a long time, and in addition, retrieving the BOP for repair and then re-running it was delayed by weather. There were problems getting a pressure test on the 20 casing, probably due to a leak through the shoe track. The lower formations in the 12 1/4" section (Sola, Flekkefjord, Sauda, Tau and Egersund formations.) were clearly unstable and produced lots of cavings. This created some problems with setting the casing. The well was drilled with seawater and hi-vis pills down to 745 m and with XP-07 oil based mud from 745 m to TD.

Good sands were observed in the Bryne Formation. These were found to be water wet and no hydrocarbons were observed. No oil shows were observed in the well.

No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 21 November 2011 as a dry well.

Testing

No drill stem test was performed.

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
112	NORDLAND GP
462	HORDALAND GP
823	ROGALAND GP
823	BALDER FM
850	SELE FM
873	LISTA FM
900	SHETLAND GP
900	EKOFISK FM
936	TOR FM
1221	HOD FM

1229	CROMER KNOLL GP
1229	SOLA FM
1934	BOKNFJORD GP
1934	FLEKKEFJORD FM
2060	SAUDA FM
2262	TAU FM
2332	EGERSUND FM
2392	VESTLAND GP
2392	SANDNES FM
2411	BRYNE FM
2484	HEGRE GP
2484	SKAGERRAK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
GR RES ALD CTN BAR SON PWD DIR	754	2533
GR RES PWD DIR	194	754
VSP GR	786	2525

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	190.5	36	194.0	0.00	LOT
SURF.COND.	20	749.5	26	759.5	0.00	LOT
OPEN HOLE		757.0	17 1/2	757.0	0.00	LOT
PILOT HOLE		759.5	9 7/8	759.5	0.00	LOT
INTERM.	9 5/8	2340.0	12 1/4	2347.0	0.00	LOT
OPEN HOLE		2533.0	8 1/2	2533.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
149	1.03			Kill/displacement mud	

149	1.50	12.0		Kill/displacement mud	
194	1.03			Kill/displacement mud	
194	1.25	17.0		Kill/displacement mud	
662	1.03			Spud mud	
754	1.25	16.0		XP-07	
754	1.25			Kill/displacement mud	
1127	1.25	22.0		XP-07	
2062	1.35	19.0		XP-07	
2347	1.41	30.0		XP-07	
2347	1.41	31.0		XP-07	
2347	1.37	25.0		XP-07	
2347	1.37	31.0		XP-07	
2347	1.35	21.0		XP-07	
2366	1.25	15.0		XP-07	
2533	1.41	32.0		XP-07	