

**General information**

Wellbore name	24/9-9 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	BØYLA
Discovery	24/9-9 S Bøyla
Well name	24/9-9
Seismic location	MN DG 043 & 032 A
Production licence	340
Drilling operator	Marathon Petroleum Norge AS
Drill permit	1281-L
Drilling facility	SONGA DEE
Drilling days	9
Entered date	07.10.2009
Completed date	15.10.2009
Release date	15.10.2011
Publication date	15.10.2011
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	PALEOCENE
1st level with HC, formation	HERMOD FM
Kelly bushing elevation [m]	25.0
Water depth [m]	120.0
Total depth (MD) [m RKB]	2981.0
Final vertical depth (TVD) [m RKB]	2135.0
Maximum inclination [°]	64.2
Oldest penetrated age	PALEOCENE
Oldest penetrated formation	SELE FM
Geodetic datum	ED50
NS degrees	59° 19' 40.49" N
EW degrees	1° 50' 17.27" E
NS UTM [m]	6577295.29
EW UTM [m]	433882.57



UTM zone	31
NPDID wellbore	6239

Wellbore history

General

Well 24/9-9 A was drilled to appraise the oil discovery on the Marihøne A prospect made by 24/9-9 S in the Vana Sub-basin ca 6 km east of the UK border in the North Sea. The objective was to test the A2 segment in Hermod sands 1.5 km south-east of 24/9-9 S.

Operations and results

Appraisal well 24/9-9 A was drilled with the semi-submersible installation Songa Dee. It was kicked off from near vertical at 1035 m in well 24/9-9 S on 7 October 2009. Angle was built in Hordaland claystones and the Grid sands, until the Balder and Sele claystones were drilled with 64deg inclination without any indication of hole stability problem or deviation from the prognosed pore pressure. TD was set at 2981 m in the Paleocene Sele Formation. The well was drilled with Versatec oil based mud from kick-off to TD.

The main reservoir sand of the Hermod Formation was encountered at 2872 m (2052 m TVD MSL). It was oil bearing with a 21.3 m TVD oil leg down to an OWC at 2916 m (2073.4 m TVD MSL). The OWC was picked from MWD logs and was confirmed by pressure gradients. Average porosity of the oil bearing zone was 30% with an average Sw of 23%. The gross thickness of the Hermod reservoir was 23.6 m TVD. The oil based mud used produced a background weak dull yellow direct fluorescence and faint cut fluorescence, which effectively masked any mineral oil show. Additionally the solvent properties of the mud, combined with the structure destroying effect of the PDC bits and the flushing effect due to the overbalanced mud weight may have removed virtually all trace of shows from disaggregated sand grains and minimised or removed shows from sandstone aggregates.

No cores were cut in 24/9-9 A. No wire line logs were run and no fluid samples taken. Formation pressure tests were made using the Schlumberger Stethoscope tool on MWD.

The well was plugged back for a second sidetrack on 15 October 2009. It is classified as an oil appraisal well.

Testing

No drill stem test was performed.

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
145	NORDLAND GP
403	UTSIRA FM
934	NO FORMAL NAME
1124	HORDALAND GP



1124	GRID FM
1420	NO FORMAL NAME
2628	ROGALAND GP
2628	BALDER FM
2785	SELE FM
2861	HERMOD FM
2921	SELE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - DI DONIC STETH PRESS	1015	2980
MWD - NBGR GR RES POR DEN PWD...	1015	2980

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	192.0	36	194.0	0.00	LOT
SURF.COND.	13 3/8	1022.0	17 1/2	1033.0	1.55	LOT
OPEN HOLE		2981.0	9 1/2	2981.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
2731	1.40	45.0		wvjobreportmudch k.com	
2981	1.40	39.0		wvjobreportmudch k.com	

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]
6239 Formation pressure (Formasjonstrykk)	pdf	0.22

