General information

Wellbore name	25/11-23
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	BALDER
Discovery	25/11-1 Balder
Well name	25/11-23
Seismic location	
Production licence	001
Drilling operator	Esso Exploration and Production Norway A/S
Drill permit	951-L
Drilling facility	MÆRSK JUTLANDER
Drilling days	16
Entered date	13.05.1999
Completed date	28.05.1999
Release date	28.05.2001
Publication date	18.12.2002
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	EOCENE
1st level with HC, formation	INTRA BALDER FM SS
Kelly bushing elevation [m]	23.0
Water depth [m]	127.0
Total depth (MD) [m RKB]	2014.0
Final vertical depth (TVD) [m RKB]	2014.0
Maximum inclination [°]	2.11
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	STATFJORD GP
Geodetic datum	ED50
NS degrees	59° 14' 7.23'' N
EW degrees	2° 21' 4.64'' E
NS UTM [m]	6566589.88
EW UTM [m]	462983.22
UTM zone	31
NPDID wellbore	3755

Wellbore history

General

Well 25/11-23 was designed to appraise oil and gas in Eocene and Paleocene sands north of the Balder field. The well would also serve as a pilot hole for the production well if economic volumes of hydrocarbon were discovered. Additional objectives were to provide velocity control point for North Balder depth conversion and to provide a reservoir sand control point for seismic attribute calibration.

Operations and results

Appraisal well 25/11-23 was spudded with the semi-submersible installation "Mærsk Jutlander" on 13 May 1999 and drilled to 2014 m in claystones and sandstones of Early Jurassic age. The well was drilled with sea water and bentonite pills down to 970 m and with oil based mud (Enviromud) from 970 m to TD. Oil was encountered in Eocene Intra Balder Formation sandstones. Two cores were cut in the interval 1710 m to 1765.5 m in Early Eocene Balder Formation. MDT fluid samples were taken at 1755 m in the oil zone.

The well confirmed oil in intra Balder sandstones and was plugged and abandoned as an oil appraisal well on 28 May 1999.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
980.00	2010.00

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	1710.0	1747.0	[m]
2	1747.0	1765.5	[m]

Total core sample length [m]	55.5
Cores available for sampling?	YES

Core photos


1710-1715m


1715-1720m


1720-1725m


1725-1730m


1730-1735m


1735-1740m


1740-1745m


1745-1747m


1747-1752m


1752-1757m


1757-1762m


1762-1766m

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
150	NORDLAND GP
541	UTSIRA FM
650	NO FORMAL NAME
730	HORDALAND GP
730	SKADE FM
947	UNDIFFERENTIATED
1172	NO FORMAL NAME
1258	UNDIFFERENTIATED
1699	ROGALAND GP
1699	BALDER FM
1752	INTRA BALDER FM SS
1764	BALDER FM
1782	SELE FM
1796	HERMOD FM
1804	SELE FM

1808	HERMOD FM
1864	SELE FM
1866	LISTA FM
1899	HEIMDAL FM
1909	LISTA FM
1945	HEIMDAL FM
1971	SHETLAND GP
1971	EKOFISK FM
1975	STATFJORD GP

Composite logs

Document name	Document format	Document size [MB]
3755	pdf	0.37

Documents - reported by the production licence (period for duty of secrecy expired)

Document name	Document format	Document size [MB]
3755_25_11_23_COMPLETION_LOG	.pdf	1.92
3755_25_11_23_COMPLETION_REPORT	.PDF	91.58

Logs

Log type	Log top depth [m]	Log bottom depth [m]
AITH IPLT DSI	930	2017
MDT GR	1696	2017
MWD - DIR EWR-4 DGR	150	2015
VSP	538	2017

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	211.0	36	211.0	0.00	LOT
INTERM.	9 5/8	951.0	12 1/4	951.0	0.00	LOT
OPEN HOLE		2014.0	8 1/2	2014.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
420	1.04			SPUD MUD	
850	1.32	29.0		OIL (ENVIRON)	
970	1.04	1.0		SEAWATER	
970	1.13	1.0		SPUD MUD	
1151	1.32	20.0		OIL (ENVIRON)	
1606	1.32	30.0		OIL (ENVIRON)	
1735	1.32	25.0		OIL (ENVIRON)	
1769	1.34	23.0		OIL (ENVIRON)	
2014	1.32	25.0		OIL (ENVIRON)	

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]
3755_Formation_pressure_(Formasjonstrykk)	PDF	0.20