

General information

Wellbore name	25/11-13
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	25/11-13
Seismic location	BALMG 188 SP: 261.
Production licence	001
Drilling operator	Esso Exploration and Production Norway A/S
Drill permit	287-L
Drilling facility	GLOMAR BISCAY II
Drilling days	20
Entered date	10.05.1981
Completed date	29.05.1981
Release date	29.05.1983
Publication date	17.06.2011
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
2nd level with HC, age	PALEOCENE
2nd level with HC, formation	HEIMDAL FM
Kelly bushing elevation [m]	25.0
Water depth [m]	127.0
Total depth (MD) [m RKB]	1932.0
Final vertical depth (TVD) [m RKB]	1932.0
Maximum inclination [°]	3
Bottom hole temperature [°C]	55
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	TOR FM
Geodetic datum	ED50
NS degrees	59° 11' 26.49" N

EW degrees	2° 23' 24.09" E
NS UTM [m]	6561596.97
EW UTM [m]	465148.07
UTM zone	31
NPDID wellbore	373

Wellbore history

General

Well 25/11-13 was drilled to appraise the Balder Field on the Utsira High in the North Sea. The objective was to establish the presence of a thick accumulation of oil sand in the southern part of the Balder Field, and evaluate the sand-shale distribution and the reservoir quality of the Paleocene sands. Top of the Paleocene reservoir sands was anticipated at 1702 m MSL.

Operations and results

Appraisal well 25/11-13 was spudded with the semi-submersible installation Glomar Biscay II on 10 May 1981 and drilled to TD at 1932 m in the Late Cretaceous Tor Formation. The well was drilled with seawater and bentonite down to 500 m and with seawater/bentonite/lignosulphonate mud from 500 m to TD.

Shows of hydrocarbons were present in three 1-2 m thick Intra-Balder Formation sand beds between 1723 and 1743 m. The main oil-bearing Paleocene reservoir sand (Hermod Formation) was encountered between 1768.8 m to 1816.8 m. It contained oil down to the OWC at 1783 m (1758 m MSL), which is close to the regional Balder Field OWC. The average porosity in the oil zone was 33.5 %. Poorly developed 4 m thick Heimdal Formation sand was penetrated at 1858 m, and then a massive Ty Formation sandstone was penetrated from 1875 m down to the Shetland Group at 1908 m.

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

The well was permanently abandoned on 29 May 1981 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]
220.00	1932.00

Cuttings available for sampling?	YES
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Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1369.0	[m]	SWC	
1388.0	[m]	SWC	
1410.0	[m]	SWC	
1443.0	[m]	SWC	
1474.0	[m]	SWC	
1500.0	[m]	SWC	
1535.0	[m]	SWC	
1620.0	[m]	SWC	
1655.0	[m]	SWC	
1678.0	[m]	SWC	
1684.0	[m]	SWC	
1695.0	[m]	SWC	
1707.0	[m]	SWC	
1710.0	[m]	SWC	
1713.0	[m]	SWC	
1720.0	[m]	SWC	
1727.0	[m]	SWC	
1740.0	[m]	DC	
1745.0	[m]	SWC	
1746.0	[m]	SWC	
1746.0	[m]	DC	
1756.0	[m]	SWC	
1757.0	[m]	SWC	
1760.0	[m]	SWC	
1767.0	[m]	SWC	
1784.0	[m]	SWC	
1809.0	[m]	SWC	
1818.0	[m]	SWC	
1819.0	[m]	SWC	
1825.0	[m]	SWC	
1830.0	[m]	SWC	
1833.0	[m]	SWC	
1835.0	[m]	SWC	
1840.0	[m]	DC	
1842.0	[m]	SWC	
1844.0	[m]	SWC	
1848.0	[m]	SWC	
1850.0	[m]	DC	
1857.0	[m]	SWC	

1860.0	[m]	DC	
1865.0	[m]	SWC	
1870.0	[m]	DC	
1873.0	[m]	SWC	
1910.0	[m]	SWC	

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
152	NORDLAND GP
596	UTSIRA FM
695	NO FORMAL NAME
735	HORDALAND GP
735	SKADE FM
935	NO FORMAL NAME
978	SKADE FM
986	NO FORMAL NAME
1064	SKADE FM
1095	NO FORMAL NAME
1202	SKADE FM
1215	NO FORMAL NAME
1442	GRID FM
1452	NO FORMAL NAME
1678	ROGALAND GP
1678	BALDER FM
1728	INTRA BALDER FM SS
1731	BALDER FM
1737	INTRA BALDER FM SS
1741	BALDER FM
1744	SELE FM
1769	HERMOD FM
1817	SELE FM
1820	LISTA FM
1858	HEIMDAL FM
1862	VÅLE FM
1875	TY FM
1908	SHETLAND GP
1908	EKOFISK FM
1920	TOR FM

Documents - older Norwegian Offshore Directorate WDSS reports and other related documents

Document name	Document format	Document size [MB]
373_01_WDSS_General_Information	pdf	0.10
373_02_WDSS_completion_log	pdf	0.16

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

Document name	Document format	Document size [MB]
373_25_11_13_Completion_Log	pdf	1.20
373_25_11_13_Completion_Report	pdf	6.99

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DEN NEU GR	1320	1927
DIPLOG	1325	1927
DLL MLL GR	1326	1927
IEL BHC AC GR SP	149	1926
SWC	1369	1910
VELOCITY	149	1927

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	215.0	36	216.0	0.00	LOT
INTERM.	13 3/8	483.0	17 1/2	500.0	1.66	LOT
INTERM.	9 5/8	1328.0	12 1/4	1345.0	1.81	LOT
OPEN HOLE		1932.0	8 1/2	1932.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
230	1.06	75.0		waterbased	
810	1.07	43.0		waterbased	
1360	1.18	51.0		waterbased	
1860	1.20	53.0		waterbased	