

**General information**

Wellbore name	25/11-5
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	25/11-5
Seismic location	LINE SC 73-15 & sp 2125
Production licence	001
Drilling operator	Esso Exploration and Production Norway A/S
Drill permit	106-L
Drilling facility	DRILLMASTER
Drilling days	36
Entered date	03.04.1974
Completed date	08.05.1974
Release date	08.05.1976
Publication date	30.04.2010
Purpose - planned	WILDCAT
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	HERMOD FM
Kelly bushing elevation [m]	23.5
Water depth [m]	124.0
Total depth (MD) [m RKB]	2164.0
Bottom hole temperature [°C]	60
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	NO GROUP DEFINED
Geodetic datum	ED50
NS degrees	59° 12' 9.32" N
EW degrees	2° 21' 55.58" E
NS UTM [m]	6562934.90
EW UTM [m]	463755.93



UTM zone	31
NPDID wellbore	366

Wellbore history

General

Well 25/11-5 was drilled ca 4 km north west of the 25/11-1 Balder discovery well on the Utsira High in the North Sea. The well was designed to evaluate a sand build up and/or structural closure at the Middle Paleocene horizon top. The location was mapped structurally high to the adjacent wells 25/11-1, 25/11-2, 25/10-1, and 25/10-3.

Operations and results

Appraisal well 25/11-5 was spudded with the drillship Drillmaster on 3 April 1974 and drilled to TD at 2164 m in Triassic red-grey clays, and grey-green shale. Sloughing shale was the only drilling problem and this was overcome by converting the Drispac mud system to a ligno-gel seawater mud system. The well was drilled with Drispac from approximately 1000 to 1400 m, and with lignosulphonate/gel/seawater from ca 1400 m to TD.

The well penetrated the Utsira Formation and a Skade Formation sand and then entered a ca 700 m thick section of shales belonging to the lower Hordaland Group before top Balder formation was encountered at 1661 m. Significant oil bearing sands in the interval from 1714 to 1771 m were confirmed by sidewall cores and Schlumberger electric logs. The lower part of this interval tested oil at good rates. Additional shows in traces of sand in cuttings at 1838 - 1847 m were believed to be sloughings from the oil sand above.

One conventional core was cut from 1723.3 to 1725.5 m. Six attempts at FIT's were attempted with one successful at 1744.1 m. This test recovered 0.33 Sm³ gas, 4.5 l oil, 2.3 l filtrate and 0.8 l mud.

The well was permanently abandoned on 8 May 1974 as an oil appraisal.

Testing

A test through perforations at 1750 to 1765 m in the Hermod Formation produced at an average rate of 634 Sm³ oil and 29283 Sm³ gas /day. The GOR was 46.1 Sm³/Sm³ and the oil gravity was 24.2 deg API (0.91 g/cm³).

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
198.12	2164.08

Cuttings available for sampling?	NO
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Cores at the Norwegian Offshore Directorate



Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	5654.0	5661.0	[ft]

Total core sample length [m]	2.1
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1726.4	[m]	C	RRI
1727.4	[m]	C	RRI
1728.4	[m]	C	RRI
1729.1	[m]	C	RRI
1730.4	[m]	C	RRI
1730.9	[m]	C	RRI
1731.4	[m]	C	RRI
1731.7	[m]	C	RRI
1732.0	[m]	C	RRI
1732.7	[m]	C	RRI
1732.8	[m]	C	RRI
2450.0	[ft]	DC	
2480.0	[ft]	DC	
2540.0	[ft]	DC	
2630.0	[ft]	DC	
2720.0	[ft]	DC	
2810.0	[ft]	DC	
2900.0	[ft]	DC	
2990.0	[ft]	DC	
3080.0	[ft]	DC	
3170.0	[ft]	DC	
3260.0	[ft]	DC	
3350.0	[ft]	DC	
3440.0	[ft]	DC	
3530.0	[ft]	DC	
3620.0	[ft]	DC	
3710.0	[ft]	DC	
3800.0	[ft]	DC	
3890.0	[ft]	DC	
3920.0	[ft]	DC	



3980.0 [ft]	DC	
4070.0 [ft]	DC	
4110.0 [ft]	DC	
4170.0 [ft]	DC	
4270.0 [ft]	DC	
4290.0 [ft]	DC	
4330.0 [ft]	DC	
4370.0 [ft]	DC	
4470.0 [ft]	DC	
4490.0 [ft]	DC	
4530.0 [ft]	DC	
4570.0 [ft]	DC	
4650.0 [ft]	DC	
4740.0 [ft]	DC	
4830.0 [ft]	DC	
4920.0 [ft]	DC	
5010.0 [ft]	DC	
5100.0 [ft]	DC	
5190.0 [ft]	DC	
5220.0 [ft]	DC	
5250.0 [ft]	DC	
5280.0 [ft]	DC	
5280.0 [ft]	DC	
5310.0 [ft]	DC	
5340.0 [ft]	DC	
5370.0 [ft]	DC	
5400.0 [ft]	SWC	
5400.0 [ft]	DC	
5430.0 [ft]	DC	
5460.0 [ft]	DC	
5470.0 [ft]	SWC	
5508.0 [ft]	SWC	
5546.0 [ft]	SWC	
5560.0 [ft]	DC	
5570.0 [ft]	DC	
5580.0 [ft]	DC	
5600.0 [ft]	DC	
5616.0 [ft]	SWC	
5620.0 [ft]	DC	
5633.0 [ft]	DC	



5654.0 [ft]	C	
5666.0 [ft]	SWC	
5670.0 [ft]	DC	
5687.0 [ft]	SWC	
5698.0 [ft]	SWC	
5700.0 [ft]	DC	
5710.0 [ft]	SWC	
5730.0 [ft]	DC	
5760.0 [ft]	DC	
5790.0 [ft]	DC	
5820.0 [ft]	DC	
5826.0 [ft]	SWC	
5850.0 [ft]	DC	
5866.0 [ft]	SWC	
5880.0 [ft]	DC	
5910.0 [ft]	DC	
5940.0 [ft]	DC	
5970.0 [ft]	DC	
6000.0 [ft]	DC	
6030.0 [ft]	DC	
6060.0 [ft]	DC	
6120.0 [ft]	DC	
6164.0 [ft]	SWC	
6210.0 [ft]	DC	
6274.0 [ft]	SWC	
6300.0 [ft]	DC	
6400.0 [ft]	DC	
6410.0 [ft]	DC	
6440.0 [ft]	DC	
6480.0 [ft]	DC	
6490.0 [ft]	DC	
6580.0 [ft]	DC	
6680.0 [ft]	DC	
6737.0 [ft]	SWC	
6790.0 [ft]	DC	
6840.0 [ft]	DC	RRI
6880.0 [ft]	DC	
6980.0 [ft]	DC	
7080.0 [ft]	DC	

**Oil samples at the Norwegian Offshore Directorate**

Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
DST	DST1	1750.00	1765.00		30.04.1974 - 00:00	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
147	NORDLAND GP
581	UTSIRA FM
700	NO FORMAL NAME
759	HORDALAND GP
759	SKADE FM
961	NO FORMAL NAME
1661	ROGALAND GP
1661	BALDER FM
1698	INTRA BALDER FM SS
1701	BALDER FM
1724	SELE FM
1731	HERMOD FM
1771	SELE FM
1773	LISTA FM
1798	HEIMDAL FM
1873	LISTA FM
1917	SHETLAND GP
1935	CROMER KNOLL GP
1950	VIKING GP
1950	DRAUPNE FM
1955	STATFJORD GP
2087	NO GROUP DEFINED

Geochemical information

Document name	Document format	Document size [MB]
366_1	pdf	0.82





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

Document name	Document format	Document size [MB]
366 01 WDSS General Information	pdf	0.24

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

Document name	Document format	Document size [MB]
366 01 25 11 5 Completion log	pdf	1.35
366 01 25 11 5 Completion Report	pdf	4.69

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	1750	1765	0.0

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0	17.800			

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0	636	28371	0.910		44

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DIL	396	2162
DIPMETER	1397	2162
FDC CNL	1397	2163
SGR	396	2161
VELOCITY	457	2154



**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	187.0	36	190.0	0.00	LOT
SURF.COND.	13 3/8	397.0	17 1/2	411.0	0.00	LOT
INTERM.	9 5/8	1397.0	12 1/4	1412.0	0.00	LOT
LINER	7	1890.0	8 1/2	2164.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
188	0.00			seawater/ge	
1400	1.23			seawater/lg	
2163	1.22			water/spers	