

**General information**

Wellbore name	2/7-5
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	EDDA
Discovery	2/7-4 Edda
Well name	2/7-5
Seismic location	
Production licence	018
Drilling operator	Phillips Petroleum Company Norway
Drill permit	77-L
Drilling facility	OCEAN VIKING
Drilling days	121
Entered date	03.09.1972
Completed date	01.01.1973
Release date	01.01.1975
Publication date	18.01.2007
Purpose - planned	APPRAISAL
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	27.0
Water depth [m]	72.0
Total depth (MD) [m RKB]	3353.0
Maximum inclination [°]	1.5
Bottom hole temperature [°C]	100
Oldest penetrated age	LATE CRETACEOUS
Oldest penetrated formation	TOR FM
Geodetic datum	ED50
NS degrees	56° 28' 43" N
EW degrees	3° 9' 28" E
NS UTM [m]	6259500.11
EW UTM [m]	509718.77
UTM zone	31
NPDID wellbore	264



Wellbore history

General

Well 2/7-5 was drilled ca 4.5 km north-northeast of the 2/7-4 well, which found oil in the Ekofisk and Tor Formations, the Edda Discovery. The objective of the 2/7-5 well was to test the Ekofisk and Tor Formations in order to appraise the extension of this discovery.

Operations and results

Appraisal well 2/7-5 was spudded with the semi-submersible installation Ocean Viking on 3 September 1972 and drilled to TD at 3353 m in the Late Cretaceous Tor Formation. The well was drilled water based with 3 - 6 % oil addition below 1217 m.

The Ekofisk Formation was encountered at 3110 m, and the Tor Formation at 3205 m. Both formations appeared to be hydrocarbon bearing, but the water saturation was high and the permeability was generally low, which probably explained the low flow rates of the zones tested.

Eight conventional cores were cut in the interval 3120 - 3158 m in the Ekofisk Formation, and another five cores were cut in the interval 3219 - 3300 m in the Tor Formation. The cores were reported to bleed gas and oil. Scattered shows (fluorescence) were observed from top of the cored interval and down to 3285 m in the deepest core (core 13). No wire line fluid samples were taken.

The well was permanently abandoned on 1 January 1973 as a dry well with shows.

Testing

Several drill stem tests were conducted in the limestone and chalk of the Ekofisk and Tor Formations. Many were unsuccessful. Of the technically successful tests DST 1 from 3274 m to 3293 m and DST 2 from 3225 - 3237 m flowed water. DST 3 from 3210 - 3219 m flowed water with gas and trace of oil. DST 4 from 3160 - 3185 m and DST 5 from 3120 - 3130 m flowed minor amounts of gas and water.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1525.00	3352.80

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	10237.0	10293.0	[ft]
2	10293.0	10350.0	[ft]
3	10350.0	10367.0	[ft]



4	10367.0	10417.0	[ft]
5	10417.0	10431.5	[ft]
6	10431.5	10490.0	[ft]
7	10490.0	10504.0	[ft]
8	10504.0	10562.0	[ft]
9	10562.0	10570.0	[ft]
10	10619.0	10655.0	[ft]
11	10658.0	10713.0	[ft]
12	10714.0	10771.0	[ft]
13	10772.0	10822.0	[ft]

Total core sample length [m]	161.8
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
99	NORDLAND GP
1748	HORDALAND GP
2968	ROGALAND GP
2968	BALDER FM
2980	SELE FM
3033	LISTA FM
3087	VÅLE FM
3110	SHETLAND GP
3110	EKOFISK FM
3205	TOR FM

Composite logs

Document name	Document format	Document size [MB]
264	pdf	0.32

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





Document name	Document format	Document size [MB]
264_01_WDSS_General_Information	pdf	0.25

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

Document name	Document format	Document size [MB]
264_02_2_7_5_Completion_log.1	pdf	1.19
264_2_7_5_Completion_Report	pdf	19.56

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	3274	3293	0.0
2.0	3225	3237	0.0
3.0	3210	3219	0.0
4.0	3160	3185	0.0
5.0	3120	3230	0.0

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0				
2.0				
3.0				
4.0				
5.0				

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0					
2.0					
3.0					
4.0					
5.0					

Logs





Log type	Log top depth [m]	Log bottom depth [m]
BHC	481	1230
BHC C	1216	2441
BHC C	2432	3349
CBL	2359	3301
CDM AP PP	2432	3352
CNL	3002	3305
DL	2957	3349
FDC CNL	2432	3352
GR	91	481
IES	481	3352
PML	3048	3352
VELOCITY	481	3349

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	134.0	36	136.0	0.00	LOT
SURF.COND.	20	480.0	26	494.0	0.00	LOT
INTERM.	13 3/8	1217.0	17 1/2	1217.0	0.00	LOT
INTERM.	9 5/8	2433.0	12 1/4	2443.0	0.00	LOT
INTERM.	7	3349.0	8 1/2	3353.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
121	1.08			seawater	
488	1.31			seawater	
1219	1.43	45.0		waterbased	
2438	1.71			waterbased	
3353	1.73	50.0		waterbased	