

**General information**

Wellbore name	2/7-6
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	ELDFISK
Discovery	2/7-1 Eldfisk
Well name	2/7-6
Seismic location	LINE PG-031430 SP.460.
Production licence	018
Drilling operator	Phillips Petroleum Company Norway
Drill permit	80-L
Drilling facility	OCEAN VIKING
Drilling days	70
Entered date	31.03.1973
Completed date	08.06.1973
Release date	08.06.1975
Publication date	12.08.2015
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	PALEOCENE
1st level with HC, formation	EKOFISK FM
2nd level with HC, age	LATE CRETACEOUS
2nd level with HC, formation	TOR FM
Kelly bushing elevation [m]	27.0
Water depth [m]	69.0
Total depth (MD) [m RKB]	3381.0
Maximum inclination [°]	1
Bottom hole temperature [°C]	138
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	RØDBY FM
Geodetic datum	ED50
NS degrees	56° 25' 5" N
EW degrees	3° 14' 40.6" E
NS UTM [m]	6252775.36



EW UTM [m]	515091.49
UTM zone	31
NPDID wellbore	265

Wellbore history

General

Well 2/7-6, was drilled on the northern part of the Eldfisk structure in the North Sea. The primary objective was to test the Danian Limestone, and secondarily to test for possible further hydrocarbons in the Late Cretaceous of the Eldfisk structure.

Operations and results

Wildcat well 2/7-6 was spudded with the semi-submersible installation Ocean Viking on 31 March 1973 and drilled to TD at 3381 m in the Early Cretaceous Cromer Knoll Group. The well was drilled with seawater and hi-vis sweeps down to 488 m and with gypsum-lignosulphonate mud from 488 m to TD. Diesel was added to the mud below 488 m.

The Danian Ekofisk Formation and the underlying Tor Formation were found oil bearing and tested to yield commercial quantities of oil from top at 2911 m to 3078 m.

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

The well was permanently abandoned on 8 June 1973 as an oil appraisal well.

Testing

Four drill stem tests were performed, two in the Ekofisk Formation and two in the Tor Formation.

DST1 tested the interval 2973 to 2987 m and produced after acidization 46 Sm³ oil and 12400 Sm³ gas /day through a 96/64" choke. The GOR was 274 Sm³/Sm³, the gas gravity was 0.699 (air = 1), and the oil gravity was 36.6°API.

DST2 tested the interval 3069 to 3078 m and produced after acidization 158 Sm³ oil and 56900 Sm³ gas /day through a 96/64" choke. The GOR was 359 Sm³/Sm³ and the oil gravity was 32.4°API.

DST3 tested the interval 2993 to 3054 m. The formation was not acidized. It produced 719 Sm³ oil and 184100 Sm³ gas /day. The GOR was 256 Sm³/Sm³, the gas gravity was 0.694 (air = 1), and the oil gravity was 35.9°API.

DST4 tested the interval 2914 to 2957 m and produced after acidization 691 Sm³ oil and 290700 Sm³ gas /day through a 48/64" choke. The GOR was 420 Sm³/Sm³, the gas gravity was 0.704 (air = 1), and the oil gravity was 36.2°API.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
502.92	3377.18



Cuttings available for sampling?	YES
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Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
97	NORDLAND GP
2795	ROGALAND GP
2795	BALDER FM
2807	SELE FM
2850	LISTA FM
2881	VÅLE FM
2910	SHETLAND GP
3350	CROMER KNOLL GP

Geochemical information

Document name	Document format	Document size [MB]
265_GCH_1	pdf	0.28
265_GCH_2	pdf	0.69

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

Document name	Document format	Document size [MB]
265_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]
265_2_7_6_COMPLETION_LOG	pdf	1.14
265_2_7_6_COMPLETION_REPORT	pdf	33.41

Documents - Norwegian Offshore Directorate papers





Document name	Document format	Document size [MB]
265_01_NPD_Paper_No.30_Geology_of_the_Eldfisk_Area_Well_2_7_6	pdf	72.88
265_02_NPD_Paper_No.30_Early_Tertiary-Late_Jurassic_Correlation_chart_Eldfisk_Well_2_7_6	pdf	0.82

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	2973	2987	0.0
2.0	3069	3078	0.0
3.0	2993	3054	0.0
4.0	2914	2957	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				

Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0	44	13393	0.857		
2.0	167	57200	0.863		
3.0	738	189156	0.855		
4.0	805	274673	0.843		

Logs

Log type	Log top depth [m]	Log bottom depth [m]
BHC	486	3377
CBL	2743	3331
CDM	2591	3338
CNL CCL	2743	3337
DL	2743	3377





FDC	2743	3338
GR	105	486
IES	486	3380
ML MLL	2743	3338
SNP	2426	3338
VELOCITY	486	3377

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	134.0	0.00	LOT
SURF.COND.	20	484.0	26	497.0	0.00	LOT
INTERM.	13 3/8	1211.0	17 1/2	1224.0	0.00	LOT
INTERM.	9 5/8	2426.0	12 1/4	2438.0	0.00	LOT
LINER	7	3356.0	8 1/2	3381.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
130	1.07			waterbased	
487	1.31			waterbased	
1219	1.37			waterbased	
2438	1.37			waterbased	