

**General information**

Wellbore name	7/11-3
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	COD
Discovery	7/11-1 Cod
Well name	7/11-3
Seismic location	
Production licence	018
Drilling operator	Phillips Petroleum Company Norway
Drill permit	20-L
Drilling facility	OCEAN TRAVELER
Drilling days	114
Entered date	17.10.1968
Completed date	07.02.1969
Release date	07.02.1971
Publication date	18.01.2013
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	27.0
Water depth [m]	79.0
Total depth (MD) [m RKB]	3350.0
Maximum inclination [°]	3.7
Bottom hole temperature [°C]	133
Oldest penetrated age	PALEOCENE
Oldest penetrated formation	EKOFISK FM
Geodetic datum	ED50
NS degrees	57° 2' 58.8" N
EW degrees	2° 28' 18.8" E
NS UTM [m]	6323180.27
EW UTM [m]	467959.73
UTM zone	31
NPDID wellbore	159



Wellbore history

General

Well 7/11-3 was drilled ca 3.5 km south-east of the 7/11-1 Cod discovery well on the eastern side of the Breiflabb Basin in the southern North Sea. The objective was to test the extension of the Paleocene sands that were found hydrocarbon bearing in wells 7/11-1 and 7/11-2.

Operations and results

Appraisal well 7/11-3 was spudded with the semi-submersible installation Ocean Traveller on 17 October 1968 and drilled to TD at 3350 m. The hole collapsed when drilling a shale section between 1950 m and 2300 m. Bridging took place until the mud weight was increased to 14.5 ppg. Otherwise the well was drilled without significant problems. The well was drilled with a Drispac-Flosal-Desco system, which was salt saturated when drilling the lower part of the hole.

Minor amounts of oil and gas was tested in a Forties Formation sandstone sequence correlated to the best sandstone sequences that were tested in the two first Cod wells.

Three cores were cut in the intervals 3074.2 to 3082 m, 3092.8 to 3105 m, and 3160.3 to 3177.2 m. No wire line fluid samples were taken.

The well was permanently abandoned on 7 January 1969 as an oil appraisal well.

Testing

Eight drill stem testes were carried out.

DST 1 tested the interval 3239.7 to 3246.4 m. It produced a total of 15 m3 diesel cushion, mud and water. Bottom hole temperature was 129 deg C.

DST 2 tested the interval 3210.2 to 3231.8 m. It produced a total of 14.5 m3 water, diesel cushion and mud. Bottom hole temperature was 128 deg C.

DST 3 tested the interval 3176.9 to 3202.2 m. It produced a total of 14.5 m3 water, diesel cushion and mud. Bottom hole temperature was 128 deg C.

DST 4 tested the interval 3160.5 to 3172.4 m. It produced a total of 14 m3 water, diesel cushion and mud. Bottom hole temperature was 127 deg C.

DST 5 tested the interval 3126 to 3144 m. It produced a total of 8 m3 water, diesel cushion and mud.

DST 6 tested the interval 3096 to 3110 m. It produced a total of 38.5 m3 water, diesel cushion and mud.

DST 7 tested the interval 3086.1 to 3092.2 m. It produced 14 m3 oil, 4400 Sm3 gas and 54 m3 water/day through a choke. The stock tank gas/oil ratio was 237 Sm3/Sm3. The oil was greenish-black and its gravity was 47 deg API. The bottom hole temperature at 3081.5 m was 123 deg C.

DST 1 tested the interval 3036 to 3045 m. This test gave no flow.



Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
560.80	3349.75

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	3074.2	3082.0	[m]
2	3092.8	3105.0	[m]
3	3160.3	3177.2	[m]

Total core sample length [m]	37.0
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
3074.2	[m]	C	OD
3078.5	[m]	C	OD
3081.8	[m]	C	OD
3092.8	[m]	C	OD
3095.5	[m]	C	OD
3103.8	[m]	C	OD
3162.6	[m]	C	OD
3166.3	[m]	C	OD
3176.0	[m]	C	OD

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
106	NORDLAND GP
1584	HORDALAND GP
3032	ROGALAND GP
3032	BALDER FM
3044	SELE FM



3084	FORTIES FM
3286	MAUREEN FM
3333	SHETLAND GP
3333	EKOFISK FM

Geochemical information

Document name	Document format	Document size [MB]
159_GCH_1	pdf	0.86
159_GCH_2	pdf	0.89

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

Document name	Document format	Document size [MB]
159_01_WDSS_General_Information	pdf	0.20

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

Document name	Document format	Document size [MB]
159_7_11_3_AAODC_REPORTS	PDF	16.17
159_7_11_3_CLASTIC_SEDIMENTS_OF_WELL_S	PDF	2.64
159_7_11_3_COMPLEX_LITHOLOGY_ANALYSIS	PDF	9.08
159_7_11_3_CORE_LABORATORIES	PDF	0.81
159_7_11_3_DRILLING_FLUID_SUMMARY	PDF	2.88
159_7_11_3_DRILL_STEM_TEST_DATA_TEST_NO-6	PDF	1.22
159_7_11_3_DRILL_STEM_TEST_DATA_TEST_NO-7	PDF	1.82
159_7_11_3_DRILL_STEM_TEST_DATA_TEST_NO-8	PDF	1.25
159_7_11_3_DST_NO_1_SUMMARY	PDF	0.81
159_7_11_3_EXPLORATORY_TEST_DRILLING_VESSEL_OCEAN_TRAVELER	PDF	0.48
159_7_11_3_GEOCHEM	PDF	0.12
159_7_11_3_KONTINENTALSOKKELEN_BORE_TILLATELSE_NR-20	PDF	0.07





159 7 11 3 PRELIMINARY GCH REPOR NO-7	PDF	0.57
159 7 11 3 SAND DISTRIBUTION WITHIN THE PALEOCENE	PDF	12.03
159 7 11 3 SYNTHETIC SEISMOIGRAM REPORT	PDF	3.68
159 7 11 3 THE MICROPALAEONTOLOGY AND STRATIGRAPHY	PDF	8.88
159 7 11 3 WELL COMPLETION REPORT-1	PDF	2.59
159 7 11 3 WELL COMPLETION REPORT-2	PDF	2.32
159 7 11 3 WELL PRODUCTION TEST	PDF	1.64
159 7 11 3 WELL PRODUCTION TEST 2	PDF	3.25

Documents - Norwegian Offshore Directorate papers

Document name	Document format	Document size [MB]
159 01 NPD Paper No.10 Lithology Well 7 11 3	pdf	24.45
159 02 NPD Paper No.10 Lithologic Correlation chart Well 7 11 3	pdf	32.57
159 03 NPD Paper No.10 Paleocene Correlation map Well 7 11 3	pdf	12.36

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	3241	3247	0.0
2.0	3211	3233	0.0
3.0	3180	3203	0.0
4.0	3161	3173	0.0
5.0	3127	3145	0.0
6.0	3097	3111	0.0
7.0	3087	3093	0.0
8.0	3037	3046	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				
6.0				
7.0				123
8.0				

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					
6.0					
7.0	14	4400			237
8.0					

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL	1951	3292
CDM	2920	3349
FDC	2927	3351
GR	91	494
IES	1972	3351
LL-7	2927	3351
MLL	2927	3351
SGR	494	3351
SNP	2927	3299
SP	1974	3351
VSP	494	3351

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	20	172.0	26	176.0	0.00	LOT
INTERM.	13 3/8	496.0	17 1/2	511.0	0.00	LOT



INTERM.	9 5/8	1973.0	12 1/4	1994.0	0.00	LOT
PROD.	7	3341.0	8 1/2	3351.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
141	1.05			waterbased	
502	1.22			waterbased	
1993	1.43			waterbased	
2298	1.55			waterbased	
2743	1.72			waterbased	
3179	1.65			waterbased	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
10086.00	[ft]
10147.00	[ft]
10147.00	[ft]
10183.00	[ft]
10423.00	[ft]