

**General information**

Wellbore name	2/7-13
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	2/7-13
Seismic location	
Production licence	018
Drilling operator	Phillips Petroleum Company Norway
Drill permit	210-L
Drilling facility	DYVI BETA
Drilling days	80
Entered date	01.02.1979
Completed date	21.04.1979
Release date	21.04.1981
Publication date	18.01.2007
Purpose - planned	WILDCAT
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	35.0
Water depth [m]	73.0
Total depth (MD) [m RKB]	3388.0
Final vertical depth (TVD) [m RKB]	3383.0
Maximum inclination [°]	6.1
Bottom hole temperature [°C]	121
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	SOLA FM
Geodetic datum	ED50
NS degrees	56° 29' 34.74" N
EW degrees	3° 1' 58.38" E
NS UTM [m]	6261089.22
EW UTM [m]	502024.78
UTM zone	31
NPDID wellbore	272



Wellbore history

General

Exploration well 2/7-13 was drilled to the East of an intrusive salt dome in the Ekofisk area of the Norwegian sector of the North Sea. The structure had already been investigated by wells 1/9-4 and 1/9-5 to the west, and also above the salt dome in 2/7-12. The Danian/Late Cretaceous was the primary objective. A secondary objective was the possibility of a reservoir on the flank of the dome with the salt forming a seal.

Operations and results

Well 2/7-13 was spudded with the jack-up installation Dyvi Beta on 1 February 1979 and drilled to TD at 3388 m in the Early Cretaceous Sola Formation. No significant problems were reported from the operations. The well was drilled with spud mud/Drispac/seawater down to 1309 m, and with seawater/Drispac from 1309 m to TD.

Higher hydrocarbon gasses were observed from 975 m to 1113 m. Very poor fluorescence was noted in the clay and occasional limestone in the same interval. Poor shows occurred in limestones at 2210 - 2225 m and 2265 - 2274 m, and also in dolomite limestone stringers from 2387 - 2591 m. The Danian and Cretaceous limestones also gave poor oil shows with some staining in the Ekofisk Formation from 2719 to 2801 m. Five conventional cores with a total of 22 m recovered were taken in this zone from 2725.5 m to 2790 m. No wire line fluid samples were taken.

The well was permanently abandoned on 21 April 1979 as a dry well with shows.

Testing

Four intervals in the 8 1/2" section were tested through 7" liner. DST 1 tested the Hydra Formation from 3188 to 3257 m and produced 504 Sm³ water with 1.5% oil/day, DST 2 tested the Hod Formation from 3042 to 3085 m and produced 1441 Sm³ water with ca 3000 Sm³ gas/day, DST 3 tested the Ekofisk Formation from 2740 to 2774 m and 2793.5 to 2807 m, and DST 4 tested the Ekofisk Formation from 2697.5 to 2729 m. DST 3 and DST 4 produced only small amounts of water (1 Sm³/day and 69 Sm³/day, respectively). All rates were measured through a 38.1 mm choke.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
360.50	3388.00

Cuttings available for sampling?	YES
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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	8942.0	8948.0	[ft]
2	8973.0	8985.0	[ft]



3	9104.0	9118.0	[ft]
4	9118.0	9124.6	[ft]
5	9138.0	9154.0	[ft]

Total core sample length [m]	16.6
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
108	NORDLAND GP
1565	HORDALAND GP
2481	ROGALAND GP
2481	BALDER FM
2493	SELE FM
2536	FORTIES FM
2584	LISTA FM
2658	VÅLE FM
2697	SHETLAND GP
2697	EKOFISK FM
2818	TOR FM
3002	HOD FM
3173	BLODØKS FM
3182	HIDRA FM
3274	CROMER KNOLL GP
3274	RØDBY FM
3305	SOLA FM

Composite logs

Document name	Document format	Document size [MB]
272	pdf	0.34

Geochemical information





Document name	Document format	Document size [MB]
272_1	pdf	0.70
272_2	pdf	0.20

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

Document name	Document format	Document size [MB]
272_01_WDSS_General_Information	pdf	0.11
272_02_WDSS_completion_log	pdf	0.20

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

Document name	Document format	Document size [MB]
272_01_2_7_13_Completion_Report_and_Completion_log	pdf	24.19
272_02_2_7_13_Drilling_Completion_Report	pdf	165.50
272_2_7_13_Calacereous_Nannofossil_Biostratigraphy	pdf	0.06
272_2_7_13_Drilling_Summary_report	pdf	1.92
272_2_7_13_Northsea_Norwegian_Sector_Gamma-Residual_Oil_in_Chalk	pdf	5.81
272_2_7_13_Results_of_Routine_Core_Analysis_data	pdf	6.65
272_2_7_13_Well_Site_Core_Descriptions_Core_Analysis	pdf	13.55

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	3188	3205	38.1
2.0	3042	3084	38.1
3.0	2794	2807	38.1
4.0	2697	2729	38.1

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					
2.0					
3.0					
4.0					

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DLL MSFL GR CAL	2681	3383
FDC CNL GR	2681	3379
FIL	2690	3392
HDT	2255	3392
ISF SONIC GR	1498	3382
ISF SONIC GR SP	292	1512
ISF SP	1498	2718
VELOCITY	344	3382

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	176.0	36	178.0	0.00	LOT
SURF.COND.	20	346.0	26	361.0	1.29	LOT
INTERM.	13 3/8	1502.0	17 1/2	1515.0	1.54	LOT
INTERM.	9 5/8	2690.0	12	2722.0	1.72	LOT
LINER	7	3382.0	8 1/2	3388.0	0.00	LOT

Drilling mud



Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
346	1.03	54.0		waterbased	
657	1.19	39.0		waterbased	
1309	1.22	44.0		waterbased	
1739	1.44	41.0		waterbased	
2365	1.58	48.0		waterbased	
3152	1.58	47.0		waterbased	
3388	1.60	53.0		waterbased	