

Denne rapport
tilhører

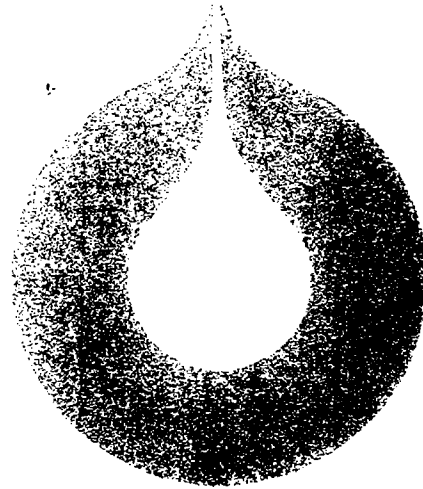


UND DOK.SENTER

L.NR. 92056019

KODE well 30/2-1 nr 26

Returneres etter bruk



statoil

RFT REPORT

1982

WELL 30/2-1

PL 051

ENGINEER: B. HULTBERG

Den norske stats oljeselskap a.s



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General Well Data

Licence : PL 051
Well : 30/2-1
Location : 60° 52' 05.42" N
 : 02° 38' 49.16" E
Rig : Dyvi Delta
Spudded : 17/5-82
Rig released : 14/10-82
RKB elevation : 30 m
Water depth : 125 m
Total depth : 4243 driller
 : 4245 logger
Objectives : Middle and lower Jurassic sandstones

RFT Logging Dates

run 1: 820607
run 2: 820723
run 3: 820804
run 4: 820907
run 5: 820911

Status : Temporarily plugged and abandoned



General

Well 30/2-1 was the first well drilled on this block.

The well was drilled to a TD of 4243 m RKB.

Logging and testing of the well showed gas accumulations under high pressure. Five RFT-runs were performed; two of these gave good results while the others failed.

Three sampling chambers were recovered with formation fluids from Etive and Rannoch.



RFT RUNS

RFT Run No. 1

A total of 11 pressure points were run between 1941 m - 1972 m (Paleocene) and all points were considered tight.

RFT Run No. 2

A total of 10 pressure tests were performed in this run (3675 - 3685, Ness). Out of these 7 failed and 3 were regarded as useful.

RFT Run No. 3

Twentyone pressure tests were carried out in this run (3682 m - 3791, Brent). 18 were reported as succesful while 3 failed.

Sampling was carried out at 3791 m (Rannoch). One 2 3/4 gallon and one 1 gallon chamber were filled, and at 3763 m (Etive) one 2 3/4 gallon was filled.

Sampling at 3707 m (Ness) failed.

RFT Run No. 4

In this run (3966 m - 4157 m, Cook and Statfjord) 13 pressure points were attempted which all failed due to either seal failure or tight formation.

RFT Run No. 5

15 pressure tests were performed in this run (3966 m - 4160 m, Cook and Statfjord). Also here they all failed due to either tight formation or seal failure.



RFT Sampling Data

Date : 4.8.82
Run no. : 6
Sample no. : 1
Depth : 3791 m
Type of sample : segregated
Max. recorded temp.: 134.4° C

2 3/4 Gallon Chamber

Flowing time : 230 sek. *3791 m*
Minimum flowing pressure : 330 bar
Shut in pressure : 672.5 bar
Opening pressure : 97.5 bar
Recoveries : 9500 cc filtrate, 0.137 m³ gas

The gas was analysed on the rig and contained:

C₁: 91%, C₂: 6%, C₃: 2.2%, IC₄: 0.5%, NC₄: 0.3%

1 Gallon Chamber

Flowing time : 220 sek.
Minimum flowing pressure: 290.5 bar
Shut-in pressure : 672 bar
Opening pressure : 75 bar
Recoveries : 3265 cc filtrate



RFT Sampling Data

Date : 4.8.82
Run no. : 6
Sample no. : 2
Depth : 3763 m

2 3/4 Gallon Chamber

Flowing time : 485 sek.
Minimum flowing pressure: 663 bar
Shut-in pressure : 673 bar
Opening pressure : 230 bar
Recoveries : 850 cc condensate



Results

It was only possible to get good pressure values in the Brent formation.

In the Paleocene, Cook and Statfjord formations all the pressure points failed due to either tight spots or the tool failed to seal off properly.

The reason for all these bad pressure tests is unknown.

The pressure points in the Brent formation gives a gradient of 0.35 g/cc. The pressure gradient does not give any indication of a gas-watercontact in Brent.

Conclusion

The Brent formation contains hydrocarbons with a density of 0.35 g/cc.

No gas-water contact was observed. The Brent formation at the well location is hence filled with hydrocarbons.

Well 30/2-1	RFT DATA	Run no.5 (Schlumb. numeration)
Formation: Brent		

Test no	Depth m	Cor hydr. pr. before test bar	Cor. hydr. pr. after test (g/cc)	Cor. formation pres. bar	Cor. formation pres. (g/cc)	Cor. hydr. pr. after test bar	Cor. hydr. pr. after test (g/cc)	Remarks
1	3675.5	690.01	1.914	-----	-----	689.87	1.913	no seal
2	3681	691.04	1.914	-----	-----	690.97	1.914	no seal
3	3682	691.66	1.915	672.25	1.861	691.25	1.914	good perm.
4	3683	691.11	1.913	672.18	1.861	691.04	1.913	medium perm.
5	3685.5	691.73	1.913	-----	-----	691.52	1.913	no seal
6	3677	689.45	1.912	-----	-----	689.45	1.912	tight
7	3676	690.08	1.914	-----	-----	690.08	1.914	tight
8	3675.5	690.08	1.914	-----	-----	689.94	1.914	no seal
9	3685	691.39	1.913	-----	-----	691.04	1.912	tool unstable
10	3684.5	690.90	1.912	673.22	1.863	690.90	1.912	partially plugged

(2)

Depth (m.RKB)

WELL 30/2-1

RFT pressure vs depth

● RUN NO. 2
▲ RUN NO. 3

GRADIENT: 0,35 g/cc

▲ med. permeability

med. perm.
▲

3675
3700
3725
3750
3775
3800

672 673 674 675

BAR

