

# How to domesticate the Beast, called Szolnok 20 oil

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**OIL & GAS DEVELOPMENT**

My life was OK. I was relaxed, I liked my work, I had friends and girlfriends, so everything was OK.

But this year we had to start the Szolnok area oil production...

Everything changed in my life, I became more and more tense and stressfull...

Szolnok production problems started with another well's production, which is on the same area, and called Tószeg...

Tószeg oil Experiences: in the very first truck the oil became solid  
How we coped with it?

I do not want to talk about it...

...only at my psychologist...

...who I visited regularly during the construction and trial period

Szolnok – bigger problems, than at Tószeg:

**Much water ...**

...bounded water – so emulsion breaker needed

Lab test: 40 Co **pour point**, room temperature: like a stone  
Second time to go to psychologist



Like a black, hard sausage

Eye cancer



## **Condensate to inject and mix with oil**

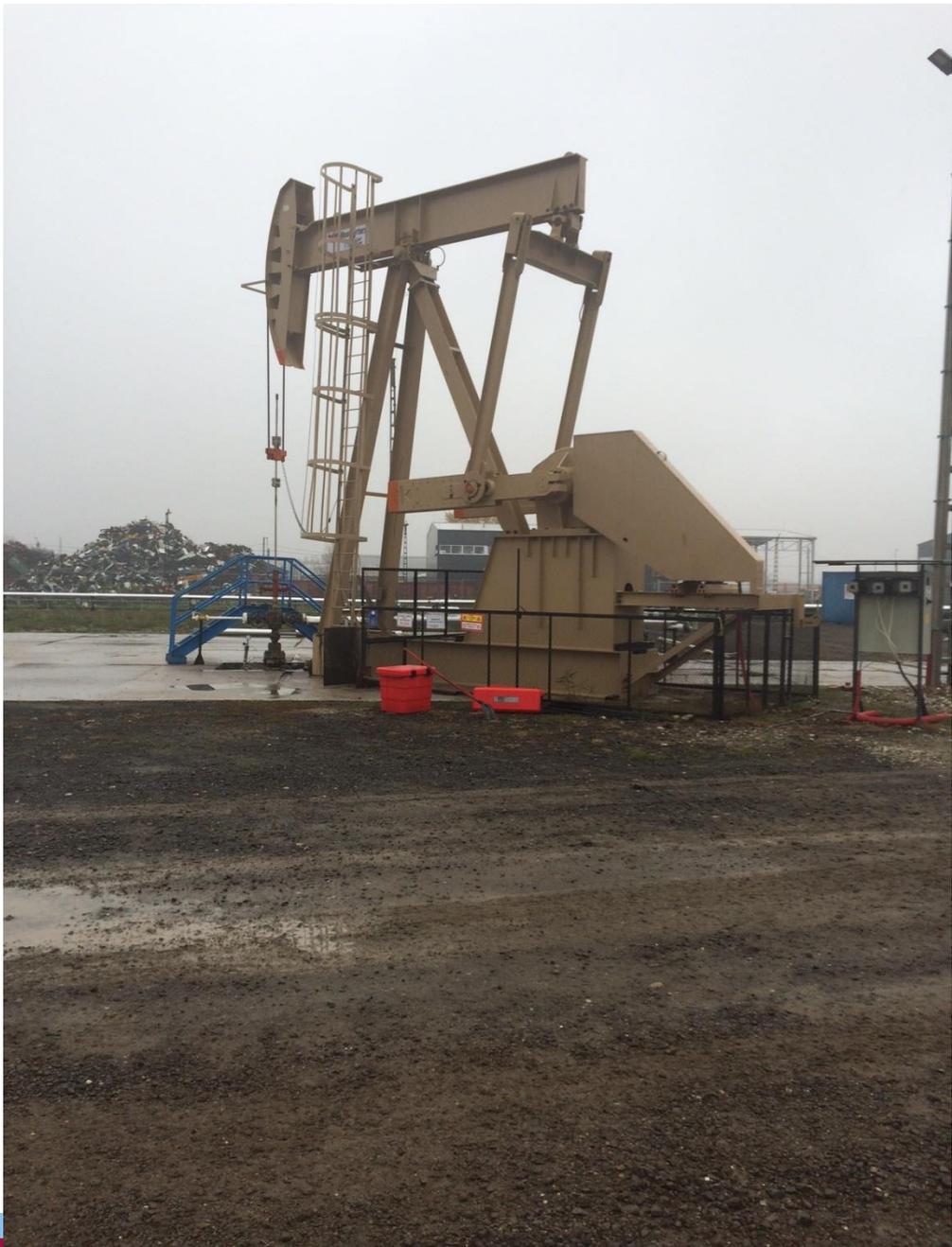
But first labtest provided fals info for us (40-----20 Co)

Heating from the wellhead, duplicator – the separator temp increased to 25 Co

# Oil needed a „help” - rod pump







Other problems:

**Low amount of oil**

It was no problem for me, I did not go to  
psychologist

But: tight budget - very challenging deadlines  
When my boss said the maximum money I can spend, I spent...  
...again a nice evening at my psychologist  
We did not have Uncle Scrooge (Dagobert Bácsi)



As simple technology as possible

**Problems with constructors – they were not available until Christmas!**

**Insulation – delay – delay – delay!**

„Original” insulation - too expensive



Insulation, foam

Very good, very cheap, but never use it!

Optical tuning - After heat camera – psychologist again!





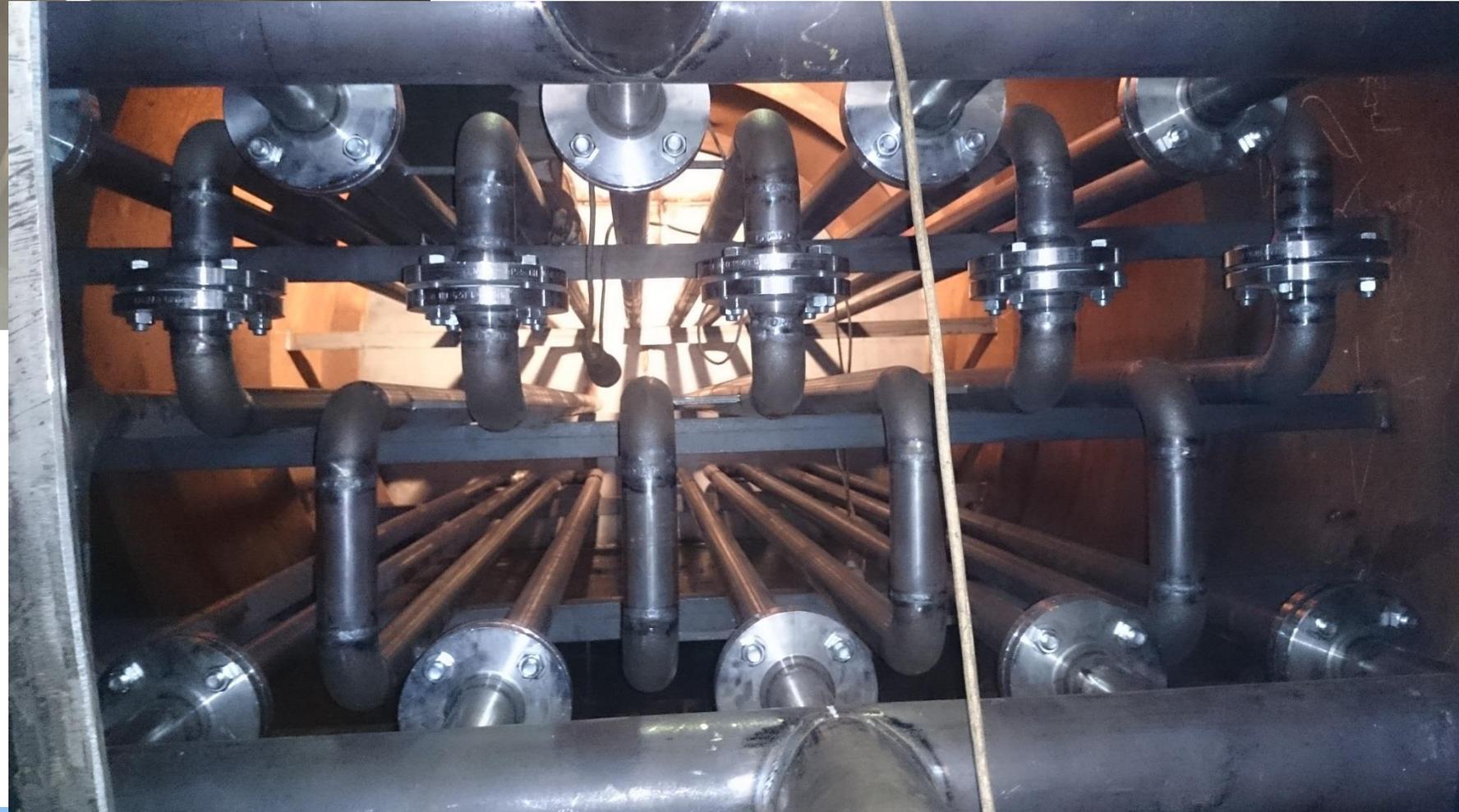
Problems with constructors

## **Mechanical constructor**

To find it – took long time

When we constructed – it was around the deadline

# Inside the heater-treater





# Tanks are not pressurized vessels



Between the vessels – manifolds - we use pumps  
We can recirculate oil to the previous points if the technology





Formation water tank – the residual oil problem  
Shovel is needed – **psychologist is needed too**



## Sight tubes – made of glass



# Sight tubes – heated



# Sight tubes – special insulation



# Sight tubes – special insulation boxes



# Sight tubes – finally using rod, calibrated tanks



Condensate line to many points of the technology; for washing, rinsing the pipes



Heating, and first without gas (Tószeg)  
Fuel oil-very expensive – instead Propane  
Then gas (Szolnok)



The only constructor, we did not have any problem regarding the quality and the deadline....

...was the instrumentation constructor, because...

...budget did not allowed any instrumentation. Everything has to be operated by manpower.

When I realised it – psychologist again

Power generator – first fuel oil-very expensive  
Instead Propane –then gas



# Propane operated gas engines



# Power generators – utilisation of heat





## Other problems

Measuring the daily amount without any gaugae – calcaulation (water, oil, condensate)

Truck problems – valve problem









Very difficult to operate – but works



There was no more big problem, but I missed it, as she was my psychologist...

I really long for other and new problems...



At the end of the story not only the oil will be domesticated, but me...  
At least my psychologist said: I am more and more gentle, I smile  
more and more, so I am on a right way to...



This is the fate of Petroleum Engineers...