



### Overview

**Run Date:** 21-Nov-2023  
**Onshore/Offshore:** Offshore  
**Formation:** Sandstone  
**Well Run/Type:** Single  
**Pump Rate:** 200 l/min  
**Casing Size / Type:** 5" #18  
**Coiled Tubing Length:** 16568 feet (5050 m)  
**Total Depth:** 2645 meters  
**InFocus Products / Services Used:** InFocus 1-11/16" TT-HSRT  
 (Thru-Tubing Hi-Speed Reaming Tool)

### Objectives

The objective of the job was to clean out debris/asphaltene from the tubing/liner in order to restore oil production from the reservoir.

The production fluid combined with the downhole conditions supports asphaltene deposition and caused the interruption of the production; the presence of scales was also taken into consideration.

### Tool Deployment / Execution

The run with InFocus 1-11/16" TT-HSRT was planned as contingency in case the first run (using a standard cleanout BHA with multijet) did not give a positive result.

During the first run, with CT at 2318 m, a stop occurred: no improvements were achieved although diesel pills have been pumped at high flowrate (solution used in similar wells with positive results).

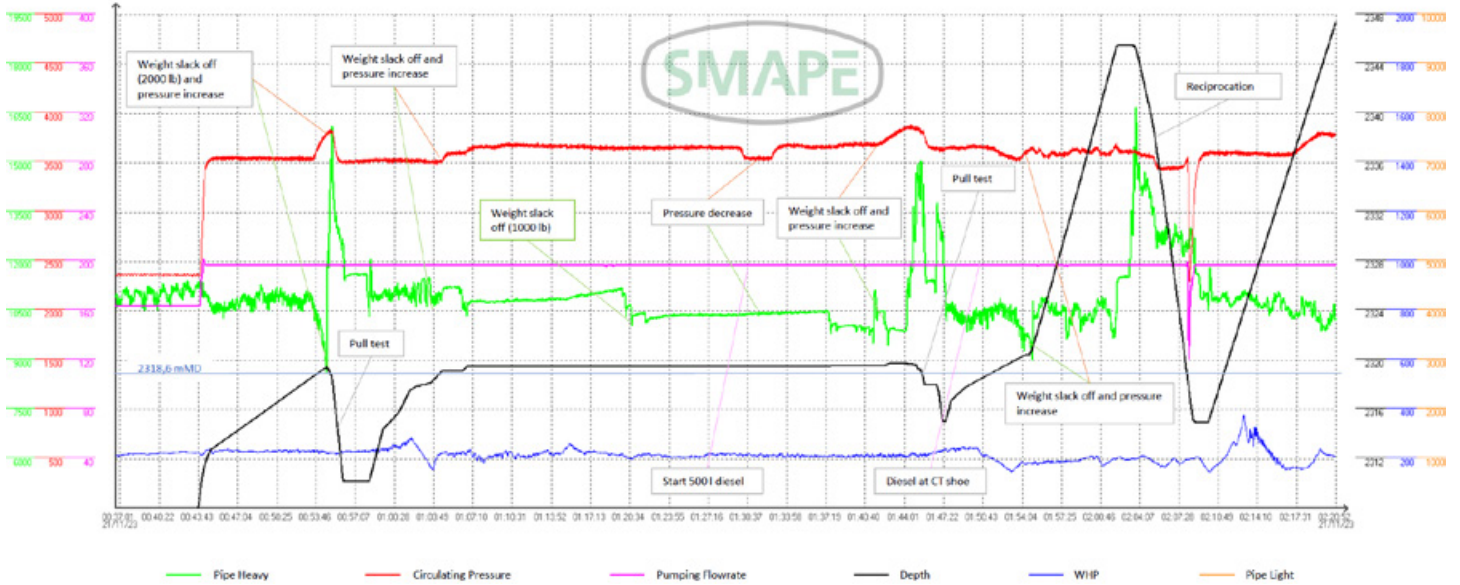
With CT on surface, the cleanout BHA has been changed with a TT-HSRT BHA.

Attached two graphs from the data acquisition system showing all the cleaning job performed by the 1-11/16" TT-HSRT.

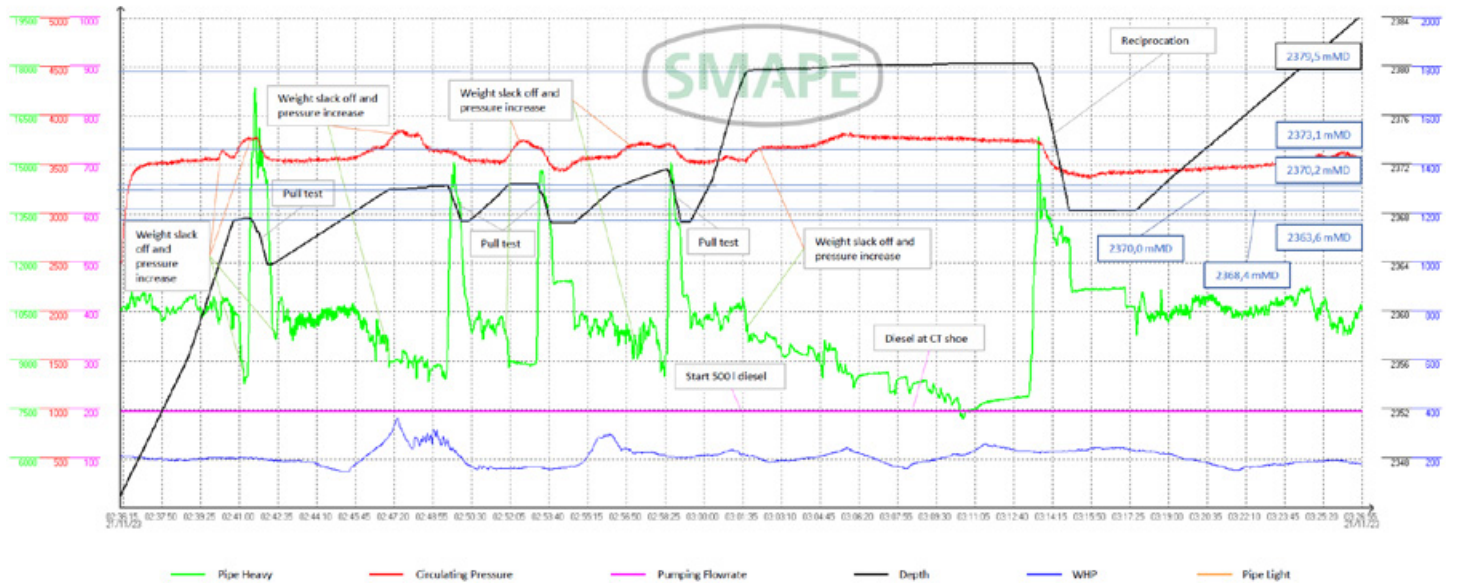
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FIRST OBSTRUCTION



ADDITIONAL OBSTRUCTIONS



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## RESULTS

During the second run (with the TT-HSRT BHA), with CT at 2318 m, a new stop occurred. After adjusting pumping flowrate to 195 l/min, and with the help of diesel pills, an attempt to pass the obstruction was successfully made.

The RIH continued all the way to TD (2645 m) recording five additional obstructions. All obstructions were removed and the CT reached TD. Production was restored.

## DRILL-OUT OBSERVATIONS

During the drill out phases, small increases (about 200 psi) in pumping pressure were recorded. At each stage the weight on bit did not exceed the value of 3000 lb.

**Total Reaming Time:** 3 hours

## CONCLUSIONS / BENEFITS

The combination of the solvent effect of the diesel and the “milling” action of the TT-HSRT was very effective in removing consolidated asphaltenes and scales. This technical solution allowed the Operator to perform the well cleanout and reach TD that the multijet was not able to perform.

## OPERATIONAL NOTES

### Well Type

Oil Producer

### BHA

The BHA was composed of: Coiled Tubing connector, Motorhead Assembly, Weight bar, 1-11/16" TT-HSRT.

### Additional Tubing Details

**Coiled Tubing Length:** 16568 feet (5050 m)

**Tubing Size & Wt:** 3.5" #9.2

**Coiled Tubing Size:** 1.5"

**Tubing ID:** 2.992"

**Drift ID:** n/a

**Min. Restriction:** 2.205"