9-5/8" and 7" HSRT's

Milestone Run

InFocus designed our fleet of HSRT: Hi-Speed Reaming Tools to ream and clean out wellbores, to land casing on bottom and be cemented in place so Operators can drill through the nose of the HSRT and continue drilling the next section. But each HSRT size is also designed to allow a smaller HSRT to run secondary casing or liners, repeating the cleanout and cementing process.

Congratulations to service provider Wildcat, and operator PetroGulf for achieving this milestone run in Egypt, beginning with a 9 5/8" HSRT and completing the second section with a 7" size!

Overview

Run Date: May 19, 2022
Operator: PetroGulf Misr
Location: Egypt
Field: Gabl El Zait
Onshore/Offshore: Offshore
Formation: South Gharib, Kareem,Nukhul
Well Type: deviated well, oil producer
Pump Rate: 100 - 250 GPM
Products / Services: InFocus 9.63" and 7.00" HSRT: Hi-Speed Reaming Tools

9 5/8" Section	7" Section
Well Type: deviated well, oil producer	**Well Type:** deviated well, 66 deg. inclination
Formation: South Gharib, Kareem Nukhul	**Formation:** Nukhul
Casing Size / Type: 9 5/8" casing	**Casing Size / Type:** 7" liner
Total Depth: 10012 feet	**Total Depth:** 12426 feet

9 5/8" Section Challenges

- High well inclination angle (66 degrees)
- Presence of of ledges in the 12-1/4" open hole as a result of interbedded formations in S.GH, Top Karem, Base Karem and Base Nukhul formations.
- Obstructions were faced while pulling the drilling BHA out of hole; then failure to log to TD using the drill string.

All of this assured the creation of ledges and hole obstructions while running the casing.

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9 5/8" Section Tool Deployment

While running the 9 5/8" casing in hole, the driller activated the HSRT on several occasions to overcome all the ledges and tight spots despite encountering slack-off weights up to 40 KLBs in some depths.

The driller succeeded at placing the casing at the programmed TD.

The rig crew drilled out the HRST successfully without any problem in 45-60 minutes, compared to hours needed by other types of reamers.

Total Reaming Time, 9 5/8": One hour

Surface testing the 9-5/8" HSRT prior to starting the casing run.

Our global clients DON'T TAKE CHANCES when running casing; they get to bottom on time and on depth with HSRT: Hi-Speed Reaming Tools from InFocus.

7" Section Challenges

- High well inclination angle (66 degrees)
- High risk of differential sticking
- Running with high overbalance to stabilize shale formation (10.9 ppg mud for 10.1 ppg shale pore pressure)
- There are streaks of active shale in base Nukhul formation.

7" Section Tool Deployment

- Faced several obstructions while running the 7" liner inside the 9 5/8"casing at 7397, 7711 and 7944 ft depths. Was able to pass the obstructions by washing down, reaming down.
- We used free rotation feature to overcome high drag inside casing.
- Ran 7" Liner string to section TD without rotating the liner string in a safe, cost-effective manner.
- The driller succeeded to place the Liner at the programmed TD
- This was the end of drilling so no-drillout was required.

Conclusion

The InFocus HSRT: Hi-Speed Reaming Tool proved its ability in overcoming all the obstructions faced while running in hole. The HSRT allowed the casing to reach the programmed TD without any problem, at minimal cost and with zero rig non-productive time.

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