

Heli-Mag String Magnets Demonstrate Efficient Debris Management in a TrackMaster Select* Casing Exit

The inclusion of high-capacity Heli-Mag String Magnets during a 9⁵/₈ casing exit in Oklahoma eliminated risks associated with debris in the wellbore, drilling fluid and BOP stack.

Efficient Debris Management is Essential

While planning a sidetrack in 9⁵/₈ casing, Wellbore Integrity Solutions (WIS) worked closely with the customer to provide a BHA that would mitigate operational risks associated with debris in the wellbore. Red Baron Heli-Mag String Magnets were included as an integral component of the BHA. These multipurpose, high load carrying magnets are used to capture metal swarf and cuttings in many different applications, including casing exits, section milling, pilot milling and general purpose remedial applications. The Heli-Mag design, equipped with rare earth magnets offer both a high magnetic strength and large load carrying capacity.

This casing exit was successfully completed in a single-trip with the TrackMaster Select system. The inclusion of Heli-Mag String Magnets resulted in efficient debris management practices, with 510 lbs of steel cuttings recovered on the magnets.

CHALLENGE

A client was concerned about debris management during a planned casing exit operation. To minimize risks associated with metal swarf in the wellbore, drilling fluid and BOP stack, the BHA design should include effective debris management with best practices and procedures applied.

SOLUTION

- An optimized BHA was designed and utilized to create the casing exit and at the same time, ensuring that the Heli-Mags were placed correctly with the required capacity to clean the wellbore.

RESULTS

- The combination of the TrackMaster Select casing exit system and Heli-Mag debris management tools delivered a successful operation at the well site.
- The TrackMaster Select system milled the 9⁵/₈ inch OD HTP-110 casing window from 16,851 ft to 16,867 ft in a single-trip.
- An estimated 510 lbs of metal debris was recovered on the Heli-Mag String Magnets.



Large swarf volume and weight successfully recovered on the Heli-Mag String Magnets



TrackMaster Select™

- A HISTORY OF INNOVATION
- UNRIVALED EXPERIENCE
- GLOBAL PRESENCE

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