CobraJet Frac® Service
Cost-effective Technology That Can Help Reduce Cost Per BOE Produced, Shorten Cycle Time and Reduce Capex

Pinpoint Accuracy Helps You Leave No Payzone Behind!

CobraJet Frac® stimulation service* helps operators quickly and cost effectively exploit multiple lenticular zones that require larger, higher rate treatments than possible with conventional coiled tubing fracturing. Compared to conventional fracturing techniques, CobraJet Frac service provides important benefits:

• Enables perforating and fracturing in the same trip in the hole.
• Eliminates the need to set plugs that must be removed later.
• Completes treatments more quickly, adding new production faster.
• No delay due to screenouts.
• All operations are on a live well.

HSE and Quality Focus

• Requires fewer trips in the hole and fewer trips to the wellsite.
• Requires smaller operating footprint for improved environmental performance.

CobraJet Frac service is continually monitored and improved under Halliburton's Correction, Prevention, and Improvement (CPI) process to achieve a high level of health, safety, and environmental performance. Halliburton's Management System (HMS) process helps achieve global transfer of best practices and consistently high service quality.

*Technology licensed from ExxonMobil Upstream Research Company.

In performing the CobraJet Frac service process, the bottomhole assembly is positioned across the lowest zone. The packer is set and perforations are cut using Hydra-Jet™ service techniques. The fracture treatment is then placed down the annulus. In this illustration, the lowest zone has been fractured and the bottomhole assembly has been repositioned to repeat the process on the next zone up the wellbore. The process is repeated until all viable zones are stimulated.
CobraJet Frac Service
Bottomhole Assembly Provides Important Performance Benefits

- Equalizing valve allows movement without flowing the well (ideal for energized fluids, screenouts).
- Reciprocating “J” enables multiple sets.
- Safety shear sub allows release of tools.
- 4-1/2-in. and 5-1/2-in. assemblies available.

Case History
CobraJet Frac Service Successfully Stimulates Gas Production and Avoids Excess Water Production

North Louisiana – Samson Resources needed to fracture stimulate their Black Stone Minerals #1-2 well, sandstone formation, well depth 10,650 ft. Treatment was to be in four stages. Since the productive zones were near water zones, other wells in the area produced excessive water when fractured conventionally. It was not uncommon for wells in the area to produce hundreds of barrels of water per day. Based on these factors, Halliburton recommended CobraJet Frac service as a means to effectively stimulate the smaller sand stringers individually as opposed to the conventional “blanket frac” approach. CobraJet Frac service can help limit water production through precise location and control of the fracturing process. In addition, all four stages could be treated in one day. Results: Gas production averaged 1895 mcfd with only 21 bwpd. The Samson engineer commented, “The ability of the CobraJet Frac service process to perform multiple treatments the same day makes the process cost effective. This has resulted in equivalent—and many times increased—production while reducing water production.”

CobraJet Frac Service Expands the Capabilities of Coiled Tubing Fracturing

Now, virtually any group of multiple zones can be stimulated with the speed and efficiency of coiled tubing. CobraJet Frac service uses coiled tubing and Halliburton’s Hydra-Jet® service to cut perforations into the zone of interest. Then, the fracturing treatment is performed down the annulus with the coiled tubing still in the hole. CobraJet Frac service has these unique characteristics:
- Allows for deeper depth applications.
- Allows for greater rates and volumes to be pumped for larger intervals.
- Smaller coiled tubing is needed which means more units are available.
- Can monitor BHP live through coiled tubing for improved diagnostics.

For more information about how CobraJet Frac® service can help add production from multiple lenticular zones and improve your ROI, contact your local Halliburton representative or email stimulation@Halliburton.com.