

# Versa-Drive extended-reach milling service

Reliably mill frac plugs from heel to toe, deliver the full value of long laterals

The **Versa-Drive™ extended-reach milling service** from Baker Hughes uses coiled-tubing-conveyed milling solutions to reliably remove plugs from long horizontal wellbores. Built on technologies and procedures honed in the shale formations of North America, the service offers proven capabilities for reaching total depth (TD) reliably, and is ideal for plug milling in all formations.

As lateral lengths and plug stages have continued to increase, many milling services have not done an adequate job of keeping up with well designs. Milling 20 plugs in a 2,000-ft (610-m) lateral is fairly straightforward. But multiply that to 100 plugs in a 12,000-ft (3,658-m) lateral, and most plug milling companies simply don't have the technology or expertise to succeed. They may have to make several runs—wasting your time and money—only to realize they can't get the bottomhole assembly (BHA) to reach lower sections of the well with enough weight on bit to remove the deepest plugs.

If you can't mill out all the plugs, you're not realizing full production potential. And you are throwing away the money you spent drilling, completing, and fracturing below the last successfully milled plug.

The Versa-Drive milling service leverages an arsenal of extended-reach technologies, advanced cutting structures, and optimized mill designs proven to reach TD in long horizontal wells. We design each job using **CIRCA™ Pro coiled tubing simulation software** (the most advanced coiled tubing modeling software on the market) to plan trip speed, circulation rates, required weight on bit, and total job time. CIRCA models provide the most accurate planning available and give us a detailed operational plan for reaching and removing every plug—usually in a single run.

We use proprietary and third-party technologies to deliver unmatched reliability in long-lateral wells. With a strong track record in shale formations across North America, we are also fully capable of performing extended-lateral milling runs in other formations. Basically, if you can drill and complete a well, we have the tools and the expertise to open it up for production.

Contact Baker Hughes today to learn more about how we can help you realize the value of your extended lateral wells by reliably milling all plugs through the toe—all in a single trip.

## Applications

- Extended laterals in all formations
- Unconventional and highly deviated wells

## Benefits

- Reach TD reliably in a single trip in extended-lateral wells
- Improve connectivity with the reservoir by removing all plugs through to the toe
- Avoid unnecessary runs and trip times regardless of lateral length
- Enable well planning for longer laterals in all formations