

Endless Rod® turns an underperforming well into a reliable producer.

CHALLENGE

Operating a deep, deviated shale well in the Bakken isn't easy. Our client had a goal to hit a production target of 350 barrels per day (55m³) in a well landed at 10,000 ft (3,048m), with side loads up to 350 lb/ft (520 kg/m) and doglegs up to 3.3 degrees.

Unfortunately, conventional sucker rod strings were proving to be problematic. Within the first year they had six (6) rod body failures, an average runtime of only 80 days (one lasted just six days), and frequent downtime and costly interventions.

They needed a solution to extend runtime and increase production, and that's when they turned to Lifting Solutions.

SOLUTION

We partnered with the client to eliminate frequent rod failures, minimize downtime, and reduce costly interventions, saving OPEX.

Our technical specialists designed a custom tapered Endless Rod string engineered for this challenging well:

- Top section: 1-1/8" Endless Rod for strength
- Middle section: 1" and 7/8" Endless Rod for flexibility
- Bottom section: Conventional 1.5" sinker bars above the pump

This tailored design delivered the reliability needed to extend runtime and lower operating costs, even in a deep, deviated well with high side loads and doglegs.

PERFORMANCE

The results were outstanding:

- After **689 days**, the well was pulled for a pump change. The Endless Rod string was inspected and found in excellent condition so it was rerun.
- It then ran for another **205 days (total 894 days)** before a second pump change. Again, Endless Rod was still in great shape and went back in the well.
- Today, this well has surpassed **1,550+ days** of runtime, far beyond the previous average of 80 days.

METRICS

Well Location: Bakken North Dakota	
Endless Rod Taper Sizes	1-1/8" x 7/8"
Tubing O.D. (inches/mm)	2-7/8 /73
Well Depth (feet/meter)	10,000/3048
Production Target (bbls/m ³)	350/55.65
Max Dogleg (Degrees/100')	2.4
Max Inclination (Degrees)	13
Max Side Load (lb/f 25')	300
Average Prior Runtime	80 Days
Endless Rod Runtime	1550+ Days

SOLUTION ✓

Endless Rod delivered exceptional durability and reliability, even in one of the most challenging well environments. Our client transformed a historically underperforming well into a reliable producer. By eliminating repeated rod body failures and dramatically extending runtime, they reduced costs and increased production proving the performance and efficiency Endless Rod delivers in deep, deviated shale wells.

Runtime
of
>1550 days

