

Endless Rod[®] delivers reliability, efficiency, and cost savings in the toughest wells.

**RUNTIMES
OVER
~1500 days**

CHALLENGE



As an operator in the Bakken, your goal is to maximize production while keeping operating costs under control. But Bakken wells make that difficult.

Deep well depths, high downhole pressure, mildly corrosive environments, and rapidly declining production rates create a perfect storm of challenges. Most operators start with electric submersible pumps (ESPs) to handle high initial production, but as rates decline, ESPs fail or require downsizing. Each replacement can cost upwards of \$150,000, driving up OPEX and frustration.

Reciprocating rod lift (RRL) systems offer a solution but adopting them early isn't easy. Deeper, deviated wells often require larger or guided rods to manage loading and deviation, increasing string weight and friction. This means higher-capacity surface equipment or trade-offs in production to fit existing units.

At Lifting Solutions, we understand these challenges. We've helped operators convert to rod lift earlier without sacrificing production, reducing costs and downtime while improving reliability.

SOLUTION



We introduced Endless Rod as the answer to two critical operator goals:

- 1. Reduce OPEX:** Convert the wells to RRL sooner, thus minimizing the cost of additional ESP operations.
- 2. Minimize Downtime:** Maintain ESP level production with RRL while minimizing downtime and failures.

The LS High Strength NS grade Endless Rod, available in diameters from 7/8" to 1-1/8", lowers rod string weight, reduces friction, and eliminates couplings boosting reliability and extending runtime. Plus, the 1-1/8" Endless Rod fits in existing 2-7/8" tubing, saving operators from expensive tubing upgrades.

PERFORMANCE



The results speak for themselves:

- Operators met production targets and maximized surface equipment efficiency.
- Wells stayed online longer, reducing downtime and intervention costs.
- To date, over 2.36 million feet of Endless Rod have been installed across 250+ Bakken wells, enabling operators to avoid costly ESP runs while still producing up to 770 barrels per day at depths of 11,000 ft.

Endless Rod works because its lighter string allows earlier rod lift adoption without sacrificing production. Its continuous design eliminates couplings, reducing failures and minimizing rod/tubing wear even under side loads of 1,300 lbf per 25 ft.

METRICS

Well Count	254
Total Install Footage (ft/m)	2,364,026 / 720,555
Average Oil API	42
Average Water Cut	80
Average Downhole Temps (F/C)	>280/138

	AVG	MAX
Runtimes (Days)	305	1,555
Production (bbls/m ³)	415/66	770/122
Rod Pump Depth (ft/m)	9,800/2,987	11,200/3,414
Side Load (lb/25')	450	1315

SUCCESS



Even in wells with challenging depths and complex geometries, Endless Rod delivers. Bakken operators have achieved runtimes exceeding 1,500 days, with an average of 300 days across all installations proving that reliability and performance aren't just promises, they're results.