

Case Study

Client Reports Impressive Reliability of SSi Artificial Lift System In North Dakota

October 14, 2020



A Major Oil Producer in North Dakota has reported impressive reliability of their SSi Artificial Lift unit over the previous 9 years.

The 360-inch stroke length, SSi Model 800 (150 horsepower), was installed almost exactly 9 years ago today (October 14th, 2011) near Crosby, North Dakota. This unit has been running continuously for 17 Million cycles, over 3,285 days.

North Dakota is known to experience extreme temperatures throughout the year, averaging from 2° F in the North, to 17° F in the Southwest with an average of fifty days below 0°. For this reason, it was extremely important to the client that the SSi unit withstand these temperatures.

All SSi units are designed with heating and cooling equipment to maintain consistent hydraulic fluid temperatures. Pumping is not initiated until hydraulic oil is at the correct temperature, benefiting both cooler Northern, and warmer Southern states.

Performance Data

- Days in Service: 3,285 days (9 years)
- Unit Total Strokes to Date: >17,000,000 strokes
- Recorded Unit Speed: 1.4 strokes per minute
- Peak Polished Road Load: 27,680 lbs
- Downhole Pump: 2-inch diameter
- Carrier Bar Miles Travelled: 172,790 miles
- Average Production to-date: 160 barrels per day

Summary

The ability of the SSi units to achieve long-stroke and slow speed pump cycles ensures minimal downtime and maximum longevity of surface and downhole equipment. This also allows SSi units to achieve a full pump card over the installed lifetime.

When compared with an SSi unit, a conventional beam pump must pump at twice the speed to achieve equivalent production.

Some additional SSi benefits include:

- Robust cylinder and elastomer design reducing maintenance requirements
- Long-stroke and slow speeds to increase life of production equipment
- Independent up and down speeds for production optimization
- Controller intelligence prevents carrier bar separation and fluid or gas pounding
- Ongoing educational sessions for operations and engineering staff on-site

SSi Artificial Lift designs and manufactures long-stroke rod lift systems that provide our clients with additional well production and extended downhole equipment life.

Click here to learn more about SSi Artificial Lift Units: <https://www.ssilift.com>