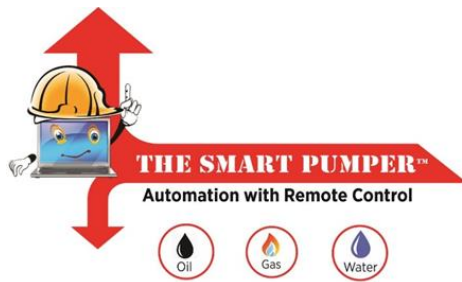


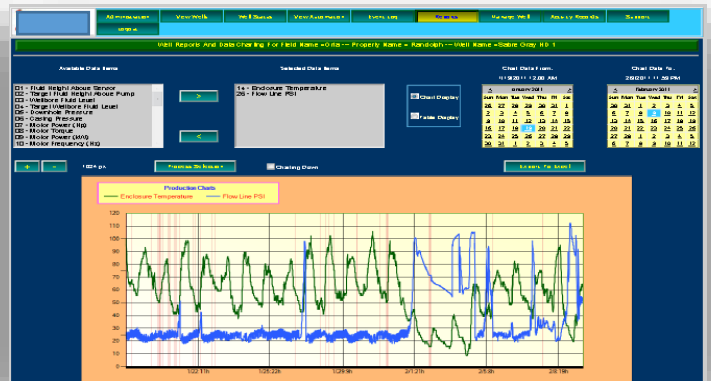
# ANNEX2 PRODUCTION OPTIMIZATION PLATFORM



- Extends Pump Run Time
- Diagnose Parted Rod Issue in Minutes
- Provides Data to Predict End of Pump Life
- Diagnose a Hole in the Tubing within Hours
- Defines Electrical Issues like Motor Ground Faults
- Renders Data and Control Features in a Visual Interface
- Helps Direct Field Maintenance and Compress Down Time



**AI matches inflow automatically** controlling VSDs (VFDs) to regulate pump speed by Smart Pumper's patented precision pump control which is based on real time fluid level to the target selected by the operator. **SPE Paper written by Staatsolie** states they achieved incremental production that ranged between 18% to 57% more after they removed previously installed optimization systems and replaced them with the **Smart Pumper Integrated Solutions**. We provide pump automation that frees the operators to work on other issues.



**Data Analytics** is made easier by the Smart Pumper which **translates VSD error codes** into meaningful messages like “over or under voltage and more.” Smart Pumper gathers more than 52 operational data points for report generation and analysis inhouse. Users will be able to define many operational issues such as parted rods, a hole in tubing, and/or flowline blockage within minutes of occurrence. Pump sizing and predictive pump life data is also provided. In addition, Smart Pumper conduct detailed reservoir build up tests.

The Smart Pumper is a Production Optimization Platform that can “Connect” and “Control” both artificial lift and chemical injection at the same time, regulate proportional vales, control relays and meter flow rates.

“It learns” reservoir inflow potential and commands pump speed to match inflow in real time to maximize production while maintaining a selected fluid level above the pump. This creates a baseline for other analytic studies such as understanding pump efficiency, likely remaining pump life and data for sizing pumps in the future.

Use Smart Pumper to connect all components in the field, to automate all processes, and provide field wide intelligence to optimize production. It will compress down time, reduce lift cost and reduce HSE risk.