

PUMP FIELD TESTING AND ANALYSIS



INTRODUCTION

Pump field testing can assist in determining pump condition and optimizing maintenance planning.

Planned maintenance can often be postponed or avoided based on the use of test data to verify pump condition.

Energy can be saved by optimizing pump and system operation.

ProPump Services can supply experienced personnel and test equipment to perform a full range of pump, driver, and system testing.

OEM-trained pump service and design engineers are available to assist in the testing, analysis, and design improvements for most pump types and OEM brands.

TYPICAL SCOPE OF WORK

Pump Engineers will visit the site, review the pump operating and maintenance history, conduct walkdown inspection, and collect operating data including:

Hydraulic Performance

- *Pump capacity*
- *Total dynamic*
- *Brake horsepower*
- *Pump efficiency*
- *Net positive suction head available / required*
- *Temperatures*

Vibration Spectrum Analysis

- *Acceptability of overall and peak values*
- *Analysis of individual peak values*
- *Operating deflected shape [optional as indicated]*

Systems Review

- *Piping interface*
- *Bearing/lubrication support*
- *Seal flush / seal injection plans*

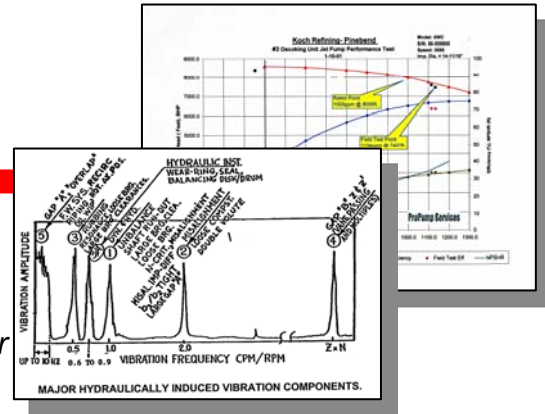


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TYPICAL INSTRUMENTATION

- Dual channel ultrasonic flow meter
- Dual channel vibration spectrum analyzer
- Thermal imaging scanner
- Digital Camera

Instrumentation and analysis is supported by an experienced team of pump design and testing engineers.



DELIVERABLES

Analysis will include the pump design and historical data in a concise report.

The summary report will also make recommendations on pump and system improvements to extend pump life and minimize energy usage.

BENEFITS

The benefits obtained from performing this testing include:

- **Address bad actor pumps**
- **Minimize operations and maintenance expense**
- **Optimize pump and driver efficiency**

