i-ALERT®

Early Detection of Issue Leads to Quick Resolution by i-ALERT and PRO Services

Background

A major O&G supplier requires multiple pump stations in their pipelines. Different product demands at varying rates requires massive coordination. Many of these pumping stations are remote and unmanned, minimizing the ability to assess pump health during operation. Often, a pump issue is not detected until failure occurs.



Solution

The i-ALERT Machine Health Solution is able to quickly and easily provide insight into the operation of multiple machine trains. The Ai Platform provides easy remote access to machine conditions and detects high vibration levels immediately.

In this instance, using the full-spectrum FFT from the i-ALERT sensor, high vibration was traced to vane pass frequency and operation far from the best efficiency point. The Goulds Pumps PRO Services team quickly inspected the pump and found severe deterioration of the base and consistent operation well below BEP. The PRO Services repair shop performed a pump overhaul and upgrade to improve operational efficiency and prevent a catastrophic failure for the end user. This early identification and planned overhaul saved over \$50k in emergency repair cost and avoided 3 months of unplanned downtime.

Full-spectrum FFT data from the i-ALERT showed early indication of pump operation far from the best efficiency point













