# SWD OPERATOR AVOIDS MAJOR PUMP FAILURE AND OPTIMIZES POWER NEEDS

Operator prevents failure and improves efficiency with OptiWatch HPS solution from Flex Flow

# CASE STUDY SWD

# \$140k saved

for initial costs of equipment replacement and downtime avoided

# \$290k saved

per year in reduced power cost

## ► BACKGROUND

As a result of a wellbore treatment, a Permian Basin saltwater disposal (SWD) facility saw a significant increase in injection rate, while simultaneously seeing a reduction in injection pressure required. As a result of these changes, the two horizontal pumping system (HPS) units being used to inject into the well were operating at approximately 10% over their maximum rated flowrate.

### **► CHALLENGES**

### **Imminent Pump Failure**

- HPS system at high risk of failure due to high flow conditions
- Failure would result in significant revenue loss and high capital expenditure

### **Unoptimized Equipment**

System operating at significantly reduced efficiency

### **SOLUTION**

Flex Flow's OptiWatch HPS optimization solution provides remote, web-based monitoring of true, real-time operational data for HPS assets, regardless of the application, configuration or manufacturer. These analytics are supported by oversight from Flex Flow's in-house HPS engineering team.

- Utilized the OptiWatch solution to identify high-risk operating conditions prior to a failure incident
- Reviewed the operator's and Flex Flow's inventory to identify pump configurations that would operate efficiently and reliably at the new conditions

### **▶ RESULTS**

This solution converted an imminent and costly failure to a planned intervention:

- Reconfigured the SWD facility within 24 hours, with 3 hours downtime instead of the 24+ hours typically required, saving \$15,000 \$20,000 of lost revenue
- Prevented failure of two HPS units with a replacement cost of approximately \$60,000 each
- Decreased power consumption per barrel from 2.05 to 1.75 kWh, saving \$290,000 per year







