

ELECTRIC ACTUATOR

INTRODUCTION

The Electric Actuator is designed to provide accurate, emissions-free electric control of oil and gas production process. In a recent field trial, the actuator was installed on a gas-assisted plunger lift in Wyoming.

PROBLEM

A producer was operating a gas-assisted plunger lift on a legacy well in Wyoming. The application was housed to prevent freezing, so pneumatic actuation was not an option.

The existing actuator was electric, but the producer found it difficult and time-consuming to learn, commission, and adjust.

PRODUCTION DETAILS

- Production Type: Gas-assisted plunger lift
- Gas Volume: 800MCF



SOLUTION

The producer worked with the Kimray team in the area to install a new Kimray Electric Actuator to the flow line on their plunger lift. When fluid in the well reached a specific pressure, a sensor would communicate to the on-site PLC, which would signal the actuator to open the 2" control valve.

This would allow fluids to pass by and flow downstream to their separation equipment. Once the pressure dropped back below the set point, the actuator would close the valve and the plunger would drop back down hole.

Summary of Installation: A 2" Control Valve with Electric Actuator was installed on plunger lift flow line

Date of Installation: October 10, 2022

"The Kimray Electric Actuator has performed extremely well in our application."

-Completions Consultant, Wyoming

RESULTS

After 2 months of operation, the producer reported the following results:

Easier to Commission

The producer found the Electric Actuator easier to install and commission than the competitor product they had been using. Its on-board push-button screen was simple to use and adjust to desired application needs.

Increased Time Between Maintenance

The producer reported consistent performance, so much so that after 2 months they decided to change the maintenance schedule for this line from 2-week checks to monthly checks.

The Electric Actuator was still in good working order and had required zero maintenance after 5 months of operation.

CUSTOMER QUOTE

"The Kimray Electric Actuator has performed extremely well in our application. With its user-friendly set up, it has also helped us standardize on a specific Standard Operating Procedure for installation of the automated control valve."

– Completions Consultant, Wyoming